



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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MUNGER & ARMOUR'S ELEVATOR AT CHICAGO IN 1857.

Among the seventy-five or more elevators which accommodate the grain that comes to the Chicago market, there are many old houses. A few of them have been standing since 1871, but the large majority are more modern, and are equipped with all the latest and best appliances, and are conveniently arranged for the rapid and economical handling of grain.

These modern houses, with their splendid equipments for handling and improving grain, stand in marked contrast with the immense grain warehouses, or elevators, as they are sometimes called, of 40 years ago. This was when elevators very much resembled huge experiments, when the country newspaper warned the farmers not to store their wheat in a grain elevator, and that the only way to store wheat was in a sack.

One of the first elevators built in Chicago is shown in the accompanying illustration, which, with the following account of its construction, we take from the *Chicago Magazine* of May, 1857:

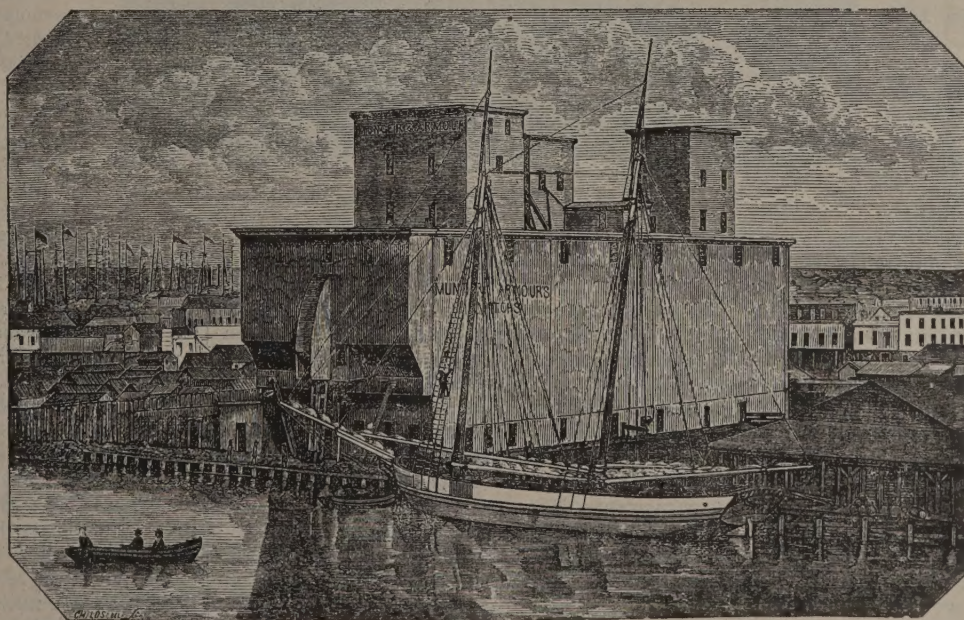
There are already twelve grain warehouses in Chicago, capable of storing upward of four million bushels of grain, and flour counted as grain. Or, their actual capacity for grain besides flour, is 3,315,000 bushels. The capacity of each is as follows: 700,000 bushels, 650,000 bushels, 600,000 bushels, 325,000 bushels, 300,000 bushels, and 200,000 bushels, all completed within two years; and 150,000 bushels, 125,000 bushels, 120,000 bushels, 60,000 bushels, 45,000 bushels, and 40,000 bushels, among the older elevators. Another is being erected to contain 650,000 bushels, which will make the actual aggregate grain capacity about four millions of bushels. In the construction of one of these, it required two millions, and in another a million and a half of Milwaukee brick. A still larger one was constructed of plank, by nailing one flat upon another. Two others, those of Messrs. Munger & Armour, and

of Messrs. Gibbs & Griffin, are constructed mostly of oak, and were built in the dead of winter. The greater part of the oak timber of which their frames were composed was growing in the woods of Michigan the November preceding the spring they were completed! As a specimen of these granaries, an engraving of that of Messrs. Munger & Armour, on the north side of the river, between Wells and Franklin streets, is given, and although there are several others larger than this, it is sufficiently large to honor the owners

road; another one near it, besides its capacity to receive 20,000 bushels per day from cars, can take in 15,000 to 20,000 bushels from canal boats, and ship 25,000 bushels per day by lake craft.

The building, a view of which is given, rests upon solid stone foundations, but is constructed of immense beams of timber, principally oak, and still further strengthened by large iron rods, by which lateral pressure is effectually guarded against. In the main building there are sixty to seventy bins, each capable of hold-

ing 5,000 bushels. These bins are so arranged that each one can be filled and emptied without carting, and without any regard to any other bin. Strong iron rods, crossing each other at right angles, bind together the side of each bin, so that one may be full, and the four around it empty, or may be empty and the four around it full, without producing any effect whatever on the strength of the sides. The bins are some ten feet square and thirty-five feet deep. There are also shipping bins in some of these houses, holding some 12,000 bushels each. The upper stories are generally used for drying damp grain. On the ground floor of these warehouses are located the steam engines and boilers, the latter en-



MUNGER & ARMOUR'S ELEVATOR AT CHICAGO IN 1857.

and the city that contains it. The cost of this building was \$65,000, or, including the fixtures, \$75,000. It can receive grain from cars, teams and canal boats, and ship by lake vessels at the same time, having capacity to receive 40,000 bushels per day from cars and teams, and 20,000 bushels at the same time from four canal boats; and it can ship with a fair chance, and has done it, 65,000 bushels a day, on board of lake vessels. There are other warehouses that can receive more grain from cars, but not from canal boats. The largest one, for instance, the Rock Island Railroad Warehouse, can unload 300 cars (or about 100,000 bushels) per day, and can ship into two lake vessels at a time, out of four shipping spouts, 12,000 bushels of grain per hour. This latter can only receive by rail-

closed in a brick vault, for the sake of retaining heat and to guard against explosions. These engines are from 75 to 125 horse power. The machinery, consisting of lines of shafting, beveled cog-wheels, etc., of great strength, runs through the entire building. Its use is to put in motion the grain elevators which carry the grain from the ground floor up into the cupolas where it is weighed. From thence it passes down through spouts into the bins. The *modus operandi* is different in the different warehouses; generally it is as follows: The grain, whether from car, canal boat or wagon, is first received into hoppers, on the lower floor. It then passes into the elevators. These are a series of Russian sheet iron buckets, attached to an endless strap, and inclosed in a large wooden pipe,

The buckets receive their freight and carry it up into the cupolas, where they discharge it into the scales, and descend for another load. The weighing process is going on at the same time, and from the scales the grain descends through spouts to the various bins in all parts of the building, or to the vessels in the docks waiting to receive it.

The cupolas of these buildings are covered on the outside with sheet iron. Their roofs, and also the roof of the main building, with a fireproof composition. There are tanks of water on the roofs, by means of which the entire building, in case of fire, can be flooded with water. It is about 100 feet from the ground to the top of these cupolas. The owners of these warehouses generally confine themselves to a strictly commission business, of storing and forwarding for other parties, for which they have unsurpassed facilities. They are men of the strictest integrity and business talent.

With the commercial marine of this city at hand to relieve these warehouses, it is not likely we shall soon lack for storage room. Had it not been for the partial failure last year of the corn crop throughout some of the Southern states, making prices so high on that account, that a large amount was drawn South (and this was favored by a break in the Illinois and Michigan Canal this spring), the receipts would the present season have pretty well taxed the capacity of our granaries. As it was, there was only about a million bushels wheat and corn, and some 50,000 barrels of flour in store here at the opening of lake navigation. The superior facilities which Chicago enjoys for receiving and forwarding grain, the less expense of storage, reshipment and commissions, compared with St. Louis, gives her quite an advantage over the latter market, in competing for the grain trade of the Illinois River; and Chicago will always get this trade, except when causes similar to the above mentioned shall operate. Only six or eight years ago St. Louis had all this trade.

THE LAMBERT GAS ENGINE.

For a score of years there has been a growing demand for a simple motor of some description, more economical, safer and cleaner, and one that would occupy less floor space. The gas and gasoline engines of to-day are more than satisfying the people in this direction. There was a time when it was said, and there may yet be a few not familiar with the satisfactory operation of the best makes of this type of motor who may say: "Oh, yes! They are all right for light power, but not desirable where heavy power is required." The day has come, however, when it is generally acknowledged that gas or gasoline engines are the cheapest and safest light and heavy power for all purposes now in use.

Their safety, economy, cleanliness and the fact that no special building is required, and that lower rates of insurance are obtainable than when steam engines are used, and that they do not require an engineer are all points recommending them.

The foregoing is in a general way applicable to all gas or gasoline engines which have met with a reasonable degree of success, and especially is it true of the Lambert Engine, as it combines excellence in construction, efficiency and economy coupled with extreme simplicity. The Lambert is not what is known as a vapor engine, but uses the gasoline raw just as received direct from the tank, hence all chances for explosions are overcome. All valves are direct acting poppets, requiring no cleaning or oiling. They lift squarely from the seat. The crank shafts are made of steel and finished to gauge. The cylinder bed and main bearings are constructed of one symmetrical casting to which the entire valve gear is attached, thus insuring perfection and durability. The charge of gas or gasoline is ignited by a small electric battery, which is furnished free with each engine.

There is a notable absence of complicated mechanism in the governor, yet it is perfectly automatic, controlling the admission and discharge perfectly,

whether few or many, as required by light or heavy load. If for any reason the speed of the engine is reduced to a motion slower than is required by the work it is doing the governor automatically cuts off the flow of gas or gasoline, preventing the serious results sure to follow if the flow was uninterrupted under like conditions. The speed of the engine can be changed and regulated while in motion same as with throttling governor on steam engine.

In the Lambert there is no packing between the cylinder and the water chamber. By a simple arrangement the water chamber is entirely distinct from the cylinder yet so constructed as to make a perfect circulation around the cylinder, keeping it uniformly cool all around and as there are no joints between the water chamber and explosion chamber there is no packing to blow out or chance for water to get into the cylinder. By this arrangement lime formed in the water chamber can be easily removed. This feature is fully covered by patents. Those interested can obtain descriptive catalogue and prices by addressing Nordyke & Marmon Company, 87 Day street, Indianapolis, Ind.

THE FORCE OF RATES INSERTED IN BILLS OF LADING.

Readers will recall that from time to time, since the passage of the act to regulate commerce, the conclu-

that which may be collected under authority of law. That charge is the one which appears in rate sheets published by the carriers themselves." Why then insert it at all?

But now comes the Supreme Court of the United States in a decision just published (Gulf, Colorado & Santa Fe Railway vs. Hefley et al.) in which the position taken by this journal is fully sustained. The syllabus of the case is as follows:

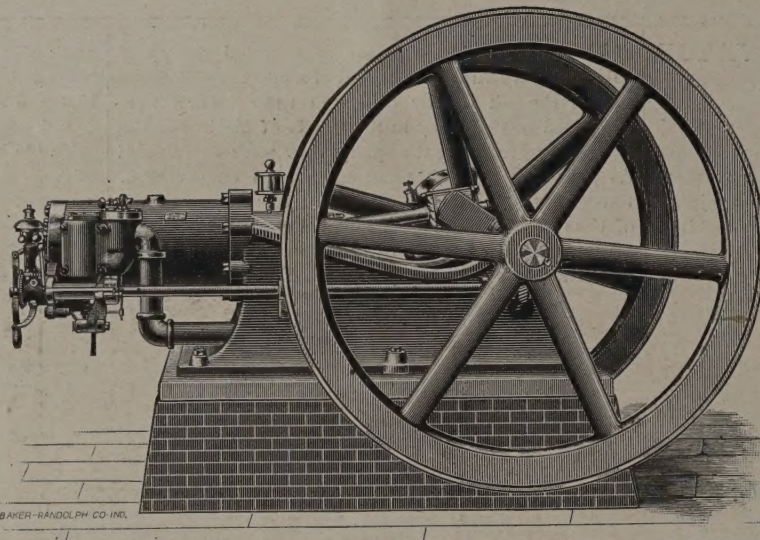
A statute of Texas (May 6, 1882) provides that no railway company in the state shall charge or collect, for the transportation of any freight, a greater sum than is specified in the bill of lading, and any railway company refusing to deliver freight to the consignee on payment or tender of the charges stated in the bill of lading shall be liable to a penalty, equal to the amount of such charges, for each day's delay. Held, that such a statute is inconsistent with the provisions of the interstate commerce act requiring railway companies engaged in interstate commerce, under penalties prescribed, to charge and collect the rates of freight specified in their published tariff schedules, and is therefore void as to interstate shipments of freight.

This case is particularly noteworthy as coming to the United States Supreme Court from a county court for the reason that the amount in controversy was so small as not to permit its being taken to a higher state court; a circumstance most fortunate because, as stated by the court, "the questions involved are of no little importance."

Briefly stated the facts in the case are as follows: The rate named in a bill of lading of the St. Louis & San Francisco Railroad Company on a carload of furniture shipped from St. Louis, Mo., to Cameron, Texas, was 69 cents per 100 pounds, amounting on the carload to \$82.80. The agent at destination corrected the billing according to the latest tariff in his possession, to 84 cents per hundred, making the charges \$100.80, and refused to deliver the goods except upon payment of that amount, although the bill of lading, together with the amount due—according to the rate named thereon—was tendered by the consignee. It is true that the agent offered to, and did, telegraph for instructions, in response to which he was on the next day authorized to and did deliver the goods on the basis of 69 cents, but the suit was nevertheless brought to determine which should govern, the bill of lading or the tariff rate. In comment-

ing upon the case Mr. Justice Brewer, who delivered the opinion, said, "Clearly the state and national acts relate to the same subject-matter and prescribe different rules. By the state act the bill of lading is made controlling as to the rate collectible, while the national statute ignores the bill of lading and makes the published tariff rate binding."

The point that the bill of lading rate is of no force as against the published tariff rate is made all the stronger because in this instance the rate named in the bill of lading was the correct rate. It appears that a reduction in the tariff rate had been made from 84 to 69 cents before the shipment was made, but up to the time of the receipt of the goods at destination the agent at Cameron was not advised of the fact and therefore demanded the rate in accordance with the tariff which he held. Had the agent been properly advised it would have so happened that his tariff rate and the rate named in the bill of lading would have agreed; but, says the court: "It is no answer to say that in this case the defendant might have complied with both the state and the national statutes; that it should have promptly notified its agents at every station of this reduction; that if it had done so the agent at Cameron could have complied with the state as well as the national law, and that its negligence in this respect is sufficient to hold it amenable to the state law. The question is not whether in any particular case operation may be given to both statutes, but whether their enforcement may expose a party to a conflict of duty. It is enough that these two statutes operative upon the same subject-matter prescribe different rules. In such case one must yield, and that



THE LAMBERT GAS ENGINE.

siveness of a rate inserted in a bill of lading has by this journal been denied and its utility questioned. This opinion has been as often controverted by other journals as well as by shippers and railroad men. Commenting upon a recent article upon the subject which appeared in our columns and which was reprinted, the AMERICAN ELEVATOR AND GRAIN TRADE says: "The views of our fair-minded contemporaries are usually free from prejudice, but in the foregoing it seems to lean toward the carrier. I. freight agents are not competent to figure out the rates without error the shipper who has had no experience in this work cannot do it. The freight agent should be competent to quote rates and the burden of his errors should fall on his road."

The statement to which objection is thus made was to the effect that, the only legal rate being the published tariff which was required by law to be made accessible to the public, any different rate therefrom was unlawful and that under the law no court would compel a railroad to protect such a rate. The nearest to an indorsement of our position heretofore made was by the Interstate Commerce Commission in its last annual report, viz.: "There is some room for question whether in view of the requirement of the publication of rates an action by a shipper or consignee can be successfully maintained when based upon the erroneous assertion in the contract of shipment or bill of lading of a charge which is less than the rate lawfully imposed and exaction of the full legal rate before delivery at destination. * * * * * What is needed is abolition of the practice of inserting in bills of lading for shipping contracts any other charge than

one is the state law." Under such a ruling there would appear to be no room left for doubt as to the lack of force in a bill of lading rate.

While so far as the authority of a bill of lading rate is by this decision definitely settled, there is one point in the case which the court overlooked, and for the accurate understanding of which a preliminary statement is necessary. The act to regulate commerce in its original form provided for the publication of the tariffs of the individual roads only. This was afterward amended so as to include the filing with the Interstate Commerce Commission of joint tariffs, with the stipulation that such publicity should be given to them as might be ordered by the commission. Under an instruction issued by that body on March 23, 1889, it was ordered that "two copies of all such tariffs should be posted for the use of the public in two public and conspicuous places in every depot, station, or office of such carrier where passengers or freight respectively are received for transportation under such schedules, in such form that they shall be accessible to the public and can be conveniently inspected." And the commission adds that "it will be seen that joint tariffs and individual tariffs are now substantially under the same rules." It will be observed, therefore, that inasmuch as the only lawful rate is the one of last issue that is filed with the Interstate Commerce Commission and duly published by law, and that in the case of joint tariffs such publication is required only at the station where the freight is received for shipment and not at the station where it is delivered, the tariff in the possession of the agent at Cameron, the delivering station, is of no lawful force and should not have been allowed to enter the case. The only lawful tariff was the one posted in accordance with the order of the commission, at St. Louis, and which in this case, by the statement of the court itself, called for 69 cents per hundred, the same rate as named in the bill of lading. This point, however, while it would serve as a good defense against the exaction of 84 cents per hundred on the shipment in question, does not affect the matter of the value of the rate named in the bill of lading. That in either case is of no account. It should be generally understood that on shipments made under a joint tariff the rate named in the tariff issued and posted according to law at the point of shipment, is the only lawful rate and that all contracts differing therefrom are necessarily invalid.—*Railway Review.*

KING CORN COMING.

Corn "the giant grass," is at present waving its green, luxuriant leaves over a larger acreage in America than ever before seeded. And never has the crop been deeper hue and greater heart. From only a few sections come reports of damaged plants. In some places it is announced that the corn is so far forward that the crop is assured. Let us not borrow trouble, neither let us build air castles. Last year at this time the promise was great—but alas! for the promise. If the later rains descend and if those scorching blasts stay bottled up in the cave of the winds, America will harvest her greatest crop of corn. Those "ifs" are yet factors in the problem. But assuming what all present conditions warrant us in assuming—that these waving fields, now "dressed in living green" shall ripen into the sere and yellow leaf—it becomes necessary to take cognizance of the fact that the corn crop of 1895 must supply not only grain but hay and bedding. Straw will be too costly for bedding and hay cannot be had. Those who are confronted with this situation can do one of two things: they can suffer without hay and straw, or they can take the advice of those who have learned by experience and supply both hay and bedding in shredded corn-fodder.

The mission of the crop killer is about exhausted. He has a chance at corn yet.

A LOADING DUMP.

We reproduce herewith an illustration, which appeared in the *Northwestern Farmer* of June 1, of the combined dump and elevator the "farmers' friend" is erecting for farmers who will ship their grain to him. This house is supposed to have been erected at Kangley, Ill. The sign on its side says: "Farmers' Coöperative Shipping Association, Kangley, Ill. Farmers, ship your grain to H. H. Carr & Co., Chicago, and save the middleman's profit."

The rates of commission charged by Chicago commission men are very small and none of them have been known to grow rich in the business, yet this generous friend of the farmer finds the business profitable enough to warrant him a return on money invested in dumps and elevators which are idle most of the time. Unless this "farmers' friend" gets the middleman's profit, which he claims to save for the farmers, he will surely come out at the little end of the horn in a few years.

J. W. Scott, assistant secretary of the Farmers Coöperative Association at Tonica, Ill., writes in the *Northwestern Farmer* of June 1, that "The coöperative idea, begun several years ago, is assuming proportions little dreamt of at the time of its conception. The trend of everything in the commercial world to-day is toward consolidation.

"At this place the farmers have recently organized



A LOADING DUMP AT KANGLEY, ILL.

themselves into an association, and in coöperation with H. H. Carr & Co. have erected a Scott Patent Combined Dump and Elevator. This invention, unique in its way, fills a long felt want, and offers the only practical, and at the same time economical, solution of the difficulties that have from time immemorial stood between the farmer and the profitable disposal of his grain. The back breaking labor of shoveling has long been a discouraging feature of consigning grain direct; and the necessity of overcoming the difficulty is what suggested this invention. All the facilities offered by the country elevator are here afforded.

"A word or two descriptive of the dump and elevator may prove interesting. About four years ago when Mr. H. H. Carr first conceived the idea of soliciting direct consignments from the farmers, the principle obstacle presented was the extra labor involved as compared with the facilities enjoyed by the owner of an elevator. Model after model was made and tested. Some suggested too much cost; others too much area; and some a doubtful capacity. But it was finally solved by a device furnishing to the farmer every facility for the loading of his grain, provided by the country elevator.

"It is a simple structure, 20 feet long, 12 feet wide and 18 feet in height. It presents the appearance of an elevator in miniature. When the grain is teamed in bulk, the only manual labor necessary is the dropping of the tail-board, one horse doing all the work. When next seen the grain is in the car. If the grain be bagged the labor of emptying alone is necessary. It is controlled exclusively by H. H. Carr & Co., who, in order to extend their connection among the farmers

have decided upon the coöperative plan; and stand ready to provide them with these modern conveniences. A number of shipments have already passed through the house and yielded an average of from 1 to 3 cents per bushel above the best possible figures that could have been obtained from the neighboring grain buyer."

Country elevator men will learn by a perusal of the foregoing that they have a new competitor, who unlike the man-with-a-scoop, will be ready to receive grain at any time.

Country elevator men are looking about for a way to overcome this new competition, but it is doubtful if it will last long enough to make a remedy necessary; farmers soon tire of "buying a pig in a poke."

THE METRIC SYSTEM OF WEIGHTS FOR THE GRAIN TRADE.

BY HENRY A. ROBINSON, STATISTICIAN UNITED STATES DEPARTMENT OF AGRICULTURE.

An important objection that might be urged against the adoption at the present time of the cental, or any other unit of measure based upon the system now in general use in the United States, is the probability that these old weights and measures will ultimately give place to the metric system. As to the substitution of a unit of measure based upon the weight of the grain for the present measure of quantity, there would seem to be some advantage in the change. The actual value of the grain could certainly be more accurately determined by weight than by measure. When the change is made, however, let the metric system be used as a basis.

The general adoption of the metric system in the United States seems highly desirable. It is the system of weights and measures employed by all European nations except Great Britain and Russia, and it is being adopted in Mexico and the republics of Central and South America. It was legalized in the United States by act of Congress in 1866, and the equivalents of the various denominations fixed by law. Its superiority as a system over that in common use in this country cannot be denied.

Regarding our own system the office of the United States Coast

and Geodetic Survey makes the following comment in one of its reports: "Our present system of weights and measures has for its sole recommendation that it has been in common use for many years. It is irrational in theory, irksome in practice, and has been condemned by all who have had practice in the use of weights and measures. Furthermore, it has never been authorized or made lawful by act of Congress, and is almost without authorization in the history of congressional legislation."

Changes in units of measure are always deprecated by statisticians owing to the difficulties in the way of comparison with previous data, but this disadvantage would be more than offset by a change to the metric system in the United States because of the great advantage to be gained as regards international uniformity. It is therefore thought that if any changes are to be made they should be in the direction of the metric system.

The *Sioux City Journal* takes up the subject of the diversion of grain freight from Chicago as indicated by the railroad reports for last year. It says there have been great changes in the routes by which grain is carried from interior points to the seaboard, the tonnage not now passing through Chicago as it formerly did, and that these changes are in large part the ultimate cause of the cutting of trunk line rates which formerly were so rigidly maintained. It adds this is a matter of pure transportation strategy, which seems really to involve the essential competition that steadily pulls down the cost of transportation, and that "for once Chicago is hit by it."

ANNUAL MEETING OF ILLINOIS GRAIN DEALERS.

The tenth annual meeting of the Illinois Board of Trade, the membership of which is made up of grain dealers, was called to order in the City Hall at Decatur, at 11:45 A. M., June 19, President Theo. P. Baxter presiding and Secretary B. S. Tyler recording. F. M. Pratt moved that the membership fee be reduced to five dollars, and the motion was carried.

The following firms were admitted to membership: J. & G. Melbous, Blue Mound, Ill.; Minor & Lear, Richmond, Va.; Crescent Grain & Elevator Co., St. Louis, Mo.; B. Inman of D. R. Francis & Bro. Commission Co., St. Louis, Mo.; Rumsey, Lightner & Co., Chicago; Donovan & Finney, Detroit, Mich.; McFadden & Co., Havana, Ill.; Turner-Hudnut Co., Pekin, Ill.; J. C. Flanagan, White Heath, Ill.; C. E. Wheeler, Emery, Ill.; Boody Elevator Co., Boody, Ill.; Irwin, Green & Co., Chicago; Rosenbaum Bros., Chicago; H. C. Hall, Paxton, Ill., and Kremer & Winkler, Arcola, Ill.

The convention then adjourned to meet at Turner Park at 2 o'clock P. M.

AFTERNOON SESSION.

The meeting was called to order at 2:35 in Park Arbor Hall by President Baxter, who asked for the presentation of new names for admission to membership. E. B. Hagen, Philo, Ill.; M. R. Alsup, Maroa, Ill.; Smith, Hippin & Co., Pekin, Ill.; E. S. Greenleaf, Jacksonville, Ill.; Ballard, Messmore & Braun, St. Louis; W. H. Barrett & Bro., Owaneco, Ill., applied for membership and were admitted.

Secretary Tyler read the minutes of the preceding meeting, which were adopted as read.

The following report of Treasurer F. M. Pratt was read and accepted:

To the Officers and Members of the Illinois Board of Trade:

I beg to submit herewith my annual report as the treasurer of the Illinois Board of Trade for the year ending June 19, 1895:

Received from ex-Treasurer Norton (including interest).....	\$183.98
Received for membership fees.....	515.00
Received for exchange.....	.10
Received for extra banquet tickets...	91.00
Total receipts.....	\$790.08
Paid out as per orders attached.....	\$537.65
Balance on hand June 18, 1895.....	252.43
	\$790.08

Respectfully submitted.

F. M. PRATT, Treasurer.

Secretary Tyler read a communication from the Mt. Pulaski Grain Co., in which complaint was made against

A. C. Buell & Co. of Chicago, for buying grain of a farmer at Milton Siding. Mr. St. John, of the Mt. Pulaski Grain Co., reported that the matter had been settled satisfactorily and requested that the Association give no further attention to it.

The complaint of E. R. Ulrich & Son against L. Everingham & Co. of Chicago, for buying direct from farmers, was read, together with the correspondence that passed between the secretary of the Association and Messrs. Ulrich & Son and L. Everingham & Co.

E. R. Ulrich Jr. reported that the purchases of Everingham & Co. from farmers amounted to 35,000 bushels, and that the firm was still buying.

G. C. McFadden of Havana reported that Everingham & Co. had been buying from farmers in their territory, and that it was their practice to send an agent about to induce farmers to put in scales and to ship to that firm.

W. B. Newbegin reported on the work of Arbitration Committee in attempting to get L. Everingham & Co. to withdraw from the territory of the members. He said that L. Everingham & Co. had a line of elevators in Iowa.

A resolution was read, amended and finally adopted as follows:

WHEREAS, The firm of L. Everingham & Co. and others of Chicago, Milwaukee, Peoria, Minneapolis, St. Paul, Cincinnati, Philadelphia and New York

have been buying grain indiscriminately through Central Illinois and other parts of the country directly from farmers and scoop-shovelers, to the detriment of the local and regular grain dealers in said territory; and,

WHEREAS, After having been written to about such dealings, the said L. Everingham & Co. have replied that their sympathy had been with the grain dealer for many years and still was, but where this sympathy was not reciprocated they felt it legitimate for them to make purchases where they choose to do so; and,

WHEREAS, Such proceedings are contrary to all the legitimate methods of doing business, and such dealings are not countenanced by the Illinois Board of Trade and the Grain Dealers' Associations of the different states; and,

WHEREAS, The constitution and by-laws of this Association make such irregular commission men subject to a fine of 2 cents per bushel on all such stuff bought or 1 cent where grain is consigned; therefore, be it

Resolved, That we, the members of this Association, hereby condemn such methods and will not countenance them, and that if such forfeit is not paid to the proper parties within sixty days after this date, then

pressed a desire to pay, but expressed his inability to do so owing to the fact that other carriers would not do so.

He said: "I do not believe the railroads intend to do anything regarding this matter either individually or collectively. I wish to say to you frankly, that I think that the railroads can, without any infringement of the law regarding discrimination, pay the elevator men for handling grain shipped. Although I admit that there is room for argument.

"Regarding the reports of shortages I will say that I was amazed by the amount of the shortages in the aggregate. Each carrier is extremely anxious to have the fight commenced on the other carrier if any is to be undertaken in this matter. Each wants to be let alone. If the suit was begun it would of necessity be a long and expensive litigation, and the railroads would exercise every kind of trickery known to man to break up your organization. To succeed the members of this association would of necessity have to sacrifice

their business, their individual rights and give up everything for the success of the suit of the association. It would be a fight in which each must be for all and all for each.

"Now in the matter of shortages the railroads say that the elevator men have no scales, hence they can not make an affidavit as to how much grain they put in the cars. They say, anyhow, we do not get any of the grain. If shortages occur the terminal elevator men get it, we do not. In order to make out a case against a carrier it would be necessary to prove that a shipper had applied to the station agent at a station where scales should have been provided and the weighing of grain been refused, and that the carrier had refused to weigh the grain at destination although it had been applied for. We could present the sworn statements of the shipper as to the weight.

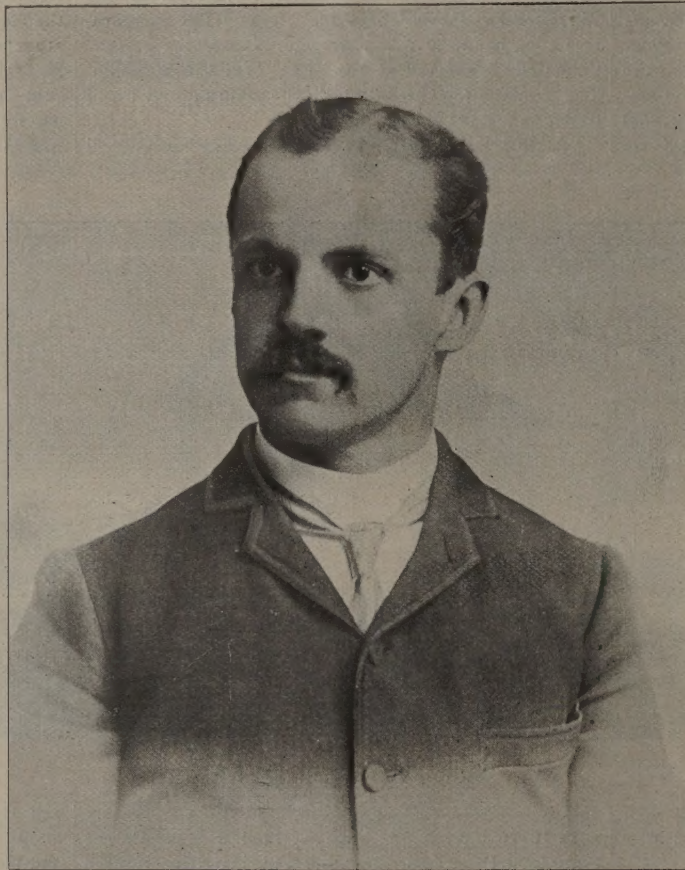
"To bring suit for putting in of scales at the points required by law, it would be necessary to have shippers apply for scales and commence suits if scales were not provided, or the states attorney might be induced to bring suit in the name of the people for recovery of the fine provided by law. Suits might be brought against railroads at a number of points throughout the state and have the different cases under the general direction of a central manager. It would be necessary to employ lawyers. It would be useless to employ any but good lawyers and they are expensive. The litigation necessary to secure the putting in of scales at

different points in the state would be hard fought and at least take three to five years. The Illinois Central officials told me they considered my request as a species of blackmail; however, they offered to bear part of the expense of a trial case if we would make it against a competitor, and suggested that we make it against the Wabash. However, one might secure a speedier termination of this matter by bringing a suit in mandamus.

"Whatever is done I wish to warn you that you must have a careful lawyer, and that you must stick together and make the fight a common cause."

The foregoing is but a small part of the address of Mr. Johns. He scored many a strong point against the carriers and showed clearly that he had made an exhaustive study of the subjects.

E. S. Greenleaf endorsed the remarks of Mr. Johns and said that the Chicago & Alton officials had acknowledged the fairness and justice of the request of the regular elevator men for a lower rate for grain shipped from their elevators. He said: "We asked the Chicago & Alton to pay us 1 cent a bushel for all grain shipped from elevators, and I think this road will grant us this rate. We do not want it in the form of a rebate, but in the form of yearly rent. If one road grants it all will have to. The plea of the railroads is that the paying for grain shipped would be discrimination. All they ask is that we point out



PRESIDENT JOHN CROCKER.

we, the members of this Association, hereby bind ourselves to discontinue trading with the above named firm, or with any firm following a like course after we have been notified of such actions individually or as firms, until such commission merchants or grain dealers have complied with the above named constitution and by-laws of this Association.

Secretary Tyler read a number of communications regarding shortages in shipments. Upon motion the communications were placed on file.

G. C. McFadden presented the following resolution, which was adopted:

WHEREAS, No. 2 Hard Winter Wheat has sold in domestic and foreign markets at the same price or a premium over No. 2 Red Winter,

Resolved, That the Board of Directors of the Chicago Board of Trade be respectfully requested to admit No. 2 Hard Winter on contracts the same as No. 2 Red Winter.

W. C. Johns, a lawyer of Decatur, said that he had been employed by the Association to try to discover if the law regarding the shipment of grain could be enforced and the shortages paid for by the carrier, and to learn if the railroad companies could legally compensate the elevator men for storing grain in their elevators for others and for receiving grain from others for immediate shipment. Mr. Johns reported that most of the traffic managers of the railroads had shown a disposition to refuse the petition asking them to pay elevator men for grain shipped. One had ex-

some way they may give us this rebate without making them amenable to the law forbidding discrimination."

Mr. Johns being called upon again for a statement as to the decisions of the railroad commissions and the courts as to the discrimination in giving the elevator man a lower rate, said that although the different freight agents had cited such cases and decisions, after thorough investigation he learned that there were none such.

E. R. Ulrich Jr. stated that one company had offered to take care of their firm if they would put up a house and buy grain at a certain station, and another road offered to pay them \$300 a year to put up an elevator and buy grain.

E. F. Unland of Pekin moved that the report be received as read, and that the committee be instructed to continue its work, and that each member labor with the officials of road over which he ships, in a persistent effort to bring about the desired result and to continue the employment of Mr. Johns. The motion was carried, and upon motion E. S. Greenleaf of Jacksonville was added to the committee for prosecuting the work of securing recompense to the elevator men for grain shipped from their elevators.

E. F. Unland of Pekin was also made a member of that committee.

W. L. Dumont of Decatur favored the paying of the Secretary for his services.

Theo. P. Baxter also favored the paying of the Secretary.

H. C. Mowry moved that the Executive Committee be instructed to investigate the work of the Secretary and pay him for his services according to the work done during the year just closed and for the current year.

E. R. Ulrich Jr. read the following report on shortages:

A short time after the last meeting on April 8, at a special meeting of the officers of the Illinois Board of Trade at Decatur, it was decided to send a man to Chicago to investigate as far as possible in regard to the shortages which are so frequently occurring in our shipments of grain to Chicago and accordingly a man was sent to Chicago. After carefully examining the methods of opening cars for inspecting, etc., and going through some of the elevators there and making a careful investigation, he reported that the facilities for handling the grain in Chicago were as near perfection as it is possible to make them, and that the stuff was handled in good shape both before it went into the elevators and afterward, but that the whole matter of handling our grain was left to the accuracy or inaccuracy of the weighmen in the elevators. He said we might load our grain into steel tanks and hermetically seal them and put four men on each car to guard it until it was dropped into the boot of the elevator at Chicago and still it might be short.

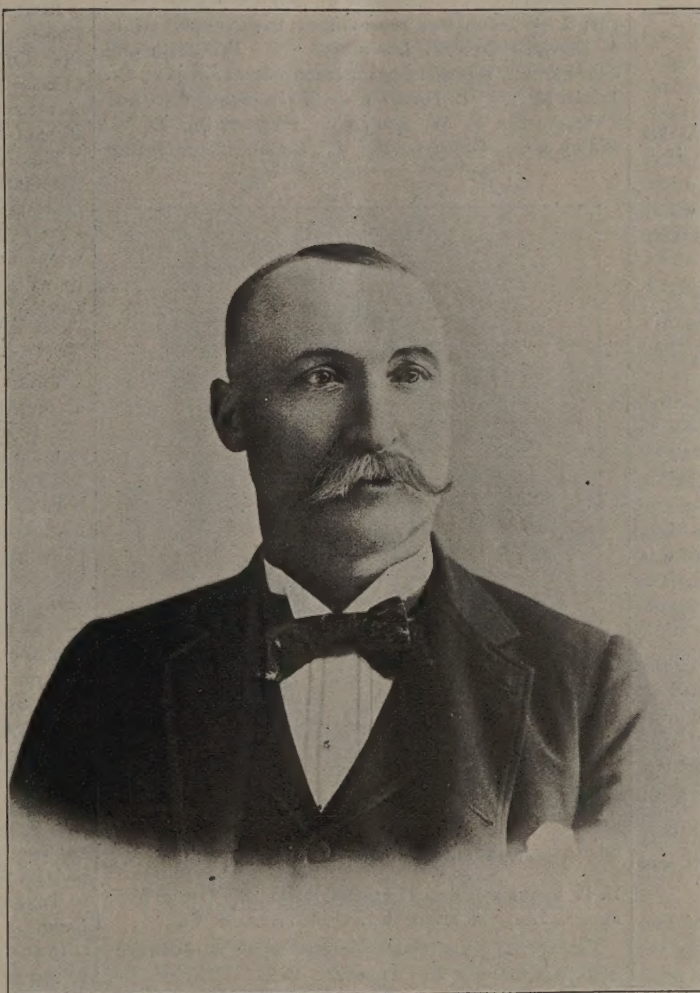
This same party was sent to East St. Louis elevators and made a like investigation and the very day he arrived there two cars of grain which went into the East St. Louis elevator, shipped by E. R. Ulrich & Son, were very short in weight, namely, car No. 10432, shipped from New Berlin, Ill., home weights 718, East St. Louis weights 678, making a shortage of 40 bushels. Also car No. 13083, shipped from Illiopolis, Ill., by the same parties, home weights 506 bushels, East St. Louis elevator weights 455 bushels, making a shortage of 51 bushels, a total of 91 bushels on the two cars. Upon looking into the matter it was found by the men who represented the Illinois Board of Trade that the weighing at this particular elevator was done in a very loose manner, and that these two cars were weighed by the foreman of the elevator himself and not by the regular weighman; and also he found that it was customary for any one of the employes to weigh who happened to be nearest to the scale at the time. There was a regular weighman who had that title, but that anybody could do the weighing who was employed in the elevator.

The most singular part of it was that those particular shortages came just when the foreman himself did the weighing. At East St. Louis they claim to have a supervisor who looks after the weighing, but it is no protection to the shipper in any sense, as one of the inspectors himself acknowledged that this supervisor

could not and did not see more than one car out of three weighed. The weighmen in one of the principal elevators in Chicago himself acknowledged that they took 40 pounds from every 40,000 pound car of grain and from other cars in proportion. They claim that they were allowed to do this by the state of Illinois, but the chairman of the warehouse commissioners, in his letter dated May 23, says that "this is a violation of the statute and we would have recourse on them for the amount taken."

East St. Louis elevators claim the right to take three pounds on the 1,000 pounds, or 120 pounds on 40,000 pound cars. Now, if they can take one pound or three pounds on each 1,000 pounds and swear that it is weighed correctly, why under the shining sun can't they take ten or twenty times that and swear to it just as well?

Now we think the whole thing in a nutshell is just as Mr. W. S. Cantrall, chairman of the warehouse commissioners, says, "The railways are required by law to issue to the shipper a receipt or bill of lading for such grain, in which shall be stated the true and



EX-PRESIDENT THEO. P. BAXTER.

correct weight. And such corporation shall weigh out and deliver to such shipper, his consignee or other person entitled to receive the same at the place of delivery, the full amount of such grain without any deduction for leakage, shrinkage or loss in quantity of same, and in default of such delivery he shall recompense the shipper for all such shortage in weight." Therefore, let the railroads have their representatives attend personally to both the weighing into and out of the cars according to the law.

Farther, in this connection, I would give a few figures showing that the work done by the association since April 8 has had a good effect. Our average shortage in all of our cars to Chicago and St. Louis previous to April 8 from July 1, 1894, was between six and seven bushels per car. Since April 8 the average is about two bushels in St. Louis and one and one-half bushels in Chicago per car to these markets, making a difference in our shipments alone of probably 2,000 bushels in two months.

In concluding I will give a few figures. As I have said our individual shipments to Chicago previous to our last meeting averaged nearly seven bushels short to the car. After the last meeting on April 8 we shipped to different firms in Chicago, our weights, 94,749.52 bushels corn, which weighed in Chicago 94,468.22, making a shortage of 281.30 bushels on the whole lot, or only averaging one and one-half bushels per car.

On 117,232.06 bushels corn, our weights, shipped to

Toledo, Ohio, the shortage was 185.53 bushels, or close to an average of one-half bushel per car. This corn to Toledo having been shipped from Nov. 1, 1894, to June 1, 1895, and during the same time to Detroit, Mich., our weights, 26,745.40, making a shortage of just thirty-two pounds on over fifty cars, an average of a little over one-half pound on the car on Detroit stuff.

I would like to have the Chicago and St. Louis people explain why stuff weighed over the same scales at this end and during the same period should fall so much short in their markets, while in Detroit and Toledo and Eastern markets the weights are good and after we make a big racket about it the weights are good in Chicago and St. Louis? Let us hear.

Let the good work go on and give the railroad and the elevator people and the parties who handle our stuff in the markets to understand that we *must and will* have just weights and no other, and there is no doubt but what it will put hundreds of thousands of dollars into the pockets of the members of this association.

Report was placed on file.

Upon motion, the association proceeded to the election of officers. John Crocker of Maroa was elected president by ballot.

The following resolution was presented and adopted:

WHEREAS, The shortage abuse has become an unbearable burden,

Resolved, That we hereby petition the Chicago Board of Trade and Chicago Receivers' and Shippers' Association to use their influence in having public weighmen placed in each of the public elevators in Chicago.

The convention then adjourned to 8:30 o'clock to attend the banquet.

After the banquet the meeting was called to order by President Baxter.

Mr. Newbegin nominated E. R. Ulrich Jr. of Springfield for vice-president and he was elected by acclamation.

H. C. Mowry nominated B. S. Tyler of Decatur for secretary and he was elected by acclamation.

F. M. Pratt of Decatur was elected treasurer by acclamation.

The following gentlemen were elected members of the Board of Directors by acclamation: Theo. P. Baxter, Taylorville; W. H. Suffern, Decatur; J. A. Montgomery, Macon; W. B. Newbegin, Blue Mound.

The following were elected members of the Executive Committee by acclamation: H. C. Mowry, Forsyth; Geo. Ford, Illiopolis; F. M. Pratt, Decatur.

The following were elected members of the Arbitration Committee by acclamation: Thos. Costello, Maroa; G. C. McFadden, Havana; E. S. Greenleaf, Jacksonville; V. R. St. John, Kenney; Thos. Ryan, Burton View.

Upon motion it was decided that the new directors and the Executive Committee should be added to the old

committees which were entrusted with the work of reforming the shortage abuse and with securing compensation for elevator services at country stations.

E. F. Catlin of St. Louis presented the following petition to St. Louis freight agents, which was adopted with instructions to send copy of same to the agents of the Wabash, Chicago & Alton, Baltimore & Ohio, Chicago, Burlington & Quincy, Topeka, Kansas City & St. Louis, Chicago, Pittsburg & St. Louis, Vandalia, Big Four, Mississippi & Ohio, Louisville & Nashville and Cairo Short Line.

To the Agent of the Wabash R. R. at East St. Louis:

We, the members of the Illinois Board of Trade or the Central Illinois Grain Dealers' Association, respectfully petition for the better protection of our shipments of grain and hay that are being sold and handled in wagons from your tracks, and believe this can be accomplished by you having your own scales and licensed weigher, and allowing no other weights taken. Furthermore, we ask that you give orders to have each empty wagon weighed before loading.

Upon motion the petition to the Chicago Board of Trade and the Chicago Grain Receivers' and Shippers' Association was reconsidered.

E. S. Greenleaf then presented the following resolution, which was adopted:

WHEREAS, The shortage in grain shipments has be-

come excessive and unbearable, we, the grain dealers of Illinois, hereby petition the various railroads centering in Chicago to have our grain weighed by a Public Weighmaster instead of by the elevator companies or purchasers of our grain, as is now the prevailing custom.

G. C. McFadden then presented the following resolution, which was referred to the Executive Committee:

WHEREAS, the grain business would be greatly simplified and the labor of conducting it minimized by the adoption of the cental as the standard unit of measure for all grains, and the discarding of the bushel of many weights,

Resolved, That we petition the Chicago Board of Trade to substitute the cental for the bushel on July 1, 1896, in all transactions on that Exchange, and petition the Agricultural Department to make all reports in centals of 100 pounds.

Upon motion it was decided to tender a vote of thanks to the Executive Committee, to the ladies of St. John's Church for the elegant banquet served, and to President Baxter for his labors in behalf of the Association.

The convention then adjourned until call.

CONVENTION NOTES.

The only machinery man present at the meeting was A. R. Montgomery, representing the Union Iron Works of Decatur, Ill.

The AMERICAN ELEVATOR AND GRAIN TRADE, which is the official organ of the Association, was represented by Charles S. Clark and John E. Bacon.

The bowling alley was not well attended, but in respect to bowling it was noticed that all the grain dealers were strictly in it "while the dance went on."

It was very noticeable how much attention the older grain dealers required from the pretty waitresses at the banquet. It was also quite clear that in respect to the waitresses "the more the merrier" was deemed in order.

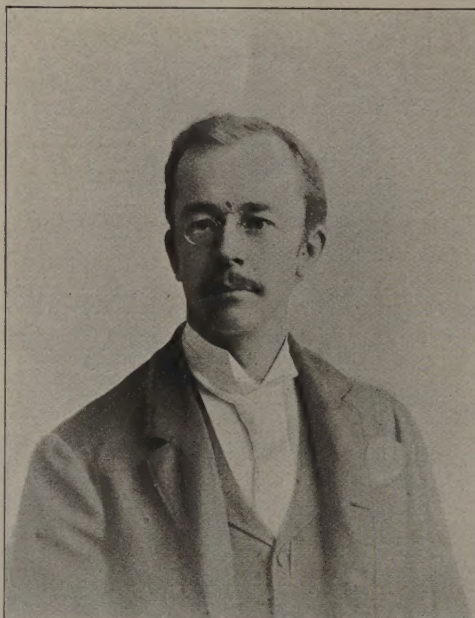
After the banquet some unfinished business was transacted by the Association, after which the hall was given over to Terpsichore, who held her sway until it was announced that the last car was about to depart for the city.

A very pleasant serenade was accorded the grain dealers and commission men as they assembled at Hotel St. Nicholas about midnight. A band of musicians in a frenzied endeavor to perform a series of musical gymnastics on their individual instruments, produced a gale of music that was even more frightful than "change" on a rapidly rising market. The bass horn squeaked and the trombone trombed. The music (?) was heartily applauded, however, as it was the very best of its kind.

The banquet was served on the wide porch of the Turner Park building, immediately adjoining the assembly hall. A large number of grain dealers were accompanied by their wives or lady friends, and the long rows of tables were quickly filled. A very excellent band from Decatur entertained the dealers and their guests with classic and popular airs during the entire course of the banquet. A number of novel effects appeared as different courses were served, the most unique being the ice cream, which was served in portions in exact imitation of a sheaf of wheat. After a very excellent repast, with the time-honored custom of "the best of the wine at the last of the feast," Toastmaster Theo. P. Baxter introduced J. A. Montgomery of Macon, who, as first speaker of the evening, responded to the toast, "Our Ladies." All who heard Mr. Montgomery knew that he was well versed in his subject. His speech was a brilliant eulogy of woman, and was heartily applauded for its good-natured satire, its sparkling wit and tender sentiment. Our "Pioneer Grain Dealers" was responded to by H. C. Mowry of Forsyth, who depicted in forcible colors the trials and hardships of the pioneer grain dealer, and the vast amount of good which he had done by opening up new markets and preparing the way in the wilderness for an advanced civilization. Charles S. Clark, of the AMERICAN ELEVATOR AND GRAIN TRADE of Chicago, responded to the toast, "Why Do Grain Dealers Permit Laws Enacted for Their Benefit to Become Dead Letters?" The toast, "Who Has the Wheat—City, Country or the Fly?"

was responded to by E. F. Catlin of St. Louis, Mo., who handled his subject with remarkable ingenuity, and after showing the different provinces where the wheat might exist, left his hearers to draw their conclusions.

The commission men present were: Frank A. Maurer, representing Irwin, Green & Co., Chicago, Ill.; I. P. Rumsey, of Rumsey, Lightner & Co., Chicago, Ill.; D. H. Winans, representing C. B. Congdon & Co., Chicago, Ill.; R. E. Pratt and John Coughlin, of R. E. Pratt & Co., Chicago, Ill.; F. M. Pratt, of Pratt & Co., Decatur, Ill.; James S. Wiley and Newton Davis, representing Pratt & Co., Decatur, Ill.; Geo. B. Dewey, representing W. M. Timberlake, Chicago, Ill.; P. P. McLaughlin, representing Donovan & Finney, Detroit, Mich.; E. A. Curtis, representing Pope & Lewis, Chicago, Ill.; L. B. Slyder and J. G. Smyth, representing Rosenbaum Brothers, Chicago, Ill.; B. S. Tyler and Chas. N. Twadell, of B. S. Tyler & Co., Decatur, Ill.; Dumont & Co., Chicago and Decatur; R. B. Thompson, representing the Crescent Grain & Elevator Co., St. Louis, Mo.; E. F. Catlin and Jas. Parrott, representing Brinson, Judd & Co., St. Louis, Mo.; W. L. Dumont, of W. L. Dumont & Co., Chicago, Ill.; F. W. Anderson, representing E. W. Bailey & Co., Chicago, Ill.; B. Inman, representing



VICE PRESIDENT E. R. ULRICH JR.

D. R. Francis & Bro. Commission Co., St. Louis, Mo.; Jno. L. Lear, of Minor & Lear, Richmond, Va.

Among the grain dealers present were: E. S. Greenleaf, Jacksonville, Ill.; Theodore Baxter, Taylorville, Ill.; E. R. Ulrich Jr., Springfield, Ill.; Ross Hockaday, Oreana, Ill.; B. T. Watson, Chesterville, Ill.; L. G. Metcalf, Illiopolis, Ill.; J. T. Walker, Moweaqua and Radford, Ill.; Thos. Ryan, Burtonview, Ill.; G. B. Spitler, Mt. Zion, Ill.; G. H. Hubbard, Lincoln, Ill.; J. L. Pumphrey, Heyworth, Ill.; J. Renshaw, Decatur, Ill.; V. R. St. John, Mt. Pulaski, Ill.; V. P. Turner, Pekin, Ill.; C. N. Jones, Bourbon, Ill.; H. A. Best, Palmer, Ill.; O. C. Flanagan, White Heath, Ill.; W. T. Farlow, Sullivan and Allenville, Ill.; L. C. Fleming, Sullivan and Allenville, Ill.; H. C. Mowry, Forsyth, Ill.; C. Braumiller, Kenney, Ill.; Geo. A. Boughn, Harriestown, Ill.; S. Sherman Neiman, Warrensburg, Ill.; W. H. Barrett, Owaneco, Ill.; T. R. Ballard, St. Louis, Mo.; F. M. Powell, Arthur, Ill.; J. W. Walker, Walker, Ill.; J. A. Montgomery, Macon, Ill.; J. Winkler, Arcola, Ill.; J. F. Beall, Niantic, Ill.; S. B. Harrison, Morrisonville, Ill.; J. H. Calver, Cushman, Ill.; E. F. Unland, Pekin, Ill.; G. C. McFadden, Havana, Ill.; J. W. Turner, Boody, Ill.; W. S. Sturgeon, Heyworth, Ill.; Wm. B. Newbegin, Blue Mound, Ill.; T. J. Freeland, Dalton City, Ill.; J. H. Uppendahl, Dalton City, Ill.; J. B. Good, Bearsdale, Ill.; John R. Veech, Oakley, Ill.; T. L. Bone, Bethany, Ill.; E. W. Crow, Blue Mound, Ill.; A. R. Scott, Bethany, Ill.; W. H. Suffern, Decatur, Ill.; C. E. Wheeler, Emery, Ill.; H. C. Hull, Paxton, Ill.; S. M. Sloan, Kenney, Ill.; A. M. Kirby, Wapella, Ill.; J. M. Duncan,

Lintner, Ill.; S. Campbell, Decatur, Ill.; T. A. Bone, Decatur, Ill.

JOHN CROCKER.

The newly elected president of the Illinois Grain Dealers' Association, John Crocker of Maroa, has been engaged in the grain business for 15 years. In 1873 his father, John H. Crocker, purchased of John Walker the Central Elevator at Maroa and conducted a grain and banking business until 1879, when his sons John and George L. were admitted to a partnership with him. The copartnership continued until the death of the father on Feb. 10, 1890, when John Crocker succeeded to the business.

In October, 1890, he formed a copartnership with Thos. Costello to handle grain at Maroa and Emery. The business was incorporated in January of the present year under the style of the Crocker Elevator Company with a capital stock of \$50,000. J. Crocker is president and Thos. Costello manager. The home office is located at Maroa, with elevators situated at Maroa, Emery, Oreana and Cisco. The company also leased the Trickle & Martin Elevator at Rantoul. Mr. Crocker in addition to these interests owns another elevator at Argenta, together with P. J. Costello, the style of firm being Costello & Crocker.

The new president of the Illinois Grain Dealers' Association is well qualified for the position. He is thoroughly acquainted with the trade and is keenly alive to all matters of importance to the grain interests which arises daily, and is familiar with the methods by which matters of importance may be made subservient to the Association's interests.

THEO. P. BAXTER.

Twenty-six years' experience has given Mr. Baxter, ex-president of the Illinois Grain Dealers' Association and secretary and treasurer of the Pratt-Baxter Grain Company at Taylorville, Ill., a thorough knowledge of the grain business in all its departments. He was born in Dayton, Ohio, Oct. 23, 1849. During that year his parents moved to Botkinsville, Ohio, at which place his father practiced medicine. Here he attended the village school held in a log schoolhouse on the turnpike 12 miles north of Sidney. During vacations he was employed as chore boy on the farms at 10, 15 and 25 cents a day. When not employed it was his custom to amuse himself riding stick horses and cracking bark whips of his own manufacture.

In 1865 he moved to Macon County, Ill. In the summer he worked at anything that was offered and in the winter attended school in the village of Forsyth. In April, 1869, he began his career in the grain business by commencing to work as office clerk and assistant bookkeeper for H. C. Mowry, manager for the firm of Day, Sprague & Co. at Forsyth. He was transferred to Taylorville in October, 1871, where he has since lived.

In the year 1876 the firm of Day, Sprague & Co. dissolved partnership. It was succeeded by S. S. Sprague & Co., and Mr. Baxter was promoted to the position of manager. Under the new management the business was largely extended and new elevators were built at Stonington, Willey and Clarksdale. No other changes were made until July 1, 1891, when the elevators were sold to R. E. Pratt of Chicago, F. M. Pratt of Decatur and Theo. P. Baxter of Taylorville. A stock company was formed under the firm name of the Pratt-Baxter Grain Company, with Mr. Baxter as secretary and treasurer.

Mr. Baxter has been a member of the Illinois Grain Dealers' Association since its organization in 1886 in Bloomington. He held various offices in the Association until two years ago, when he was elected president. He was married on Sept. 1, 1872, and has one son. Mr. Baxter has been invariably successful in his business career and the Illinois Grain Dealers' Association has been greatly strengthened by his earnest work for the advancement of common interests and the welfare of the Association.

E. R. ULRICH JR.

E. R. Ulrich Jr., vice-president of the Illinois Grain Dealers' Association, was born Feb. 8, 1861. He has been connected with his father a great part of the time for almost 20 years in the handling of grain in Central Illinois. He is thoroughly acquainted with all the details of the grain business, having given

close attention to the details and learned by experience and close application the different branches. He knows the needs of grain men and is a firm believer in organization. Speaking of trade organizations Mr. Ulrich said recently: "I believe that by thoroughly organizing, grain dealers can accomplish immeasurable results in the matter of freights, weighing and inspection, and can find better protection from irregular dealers throughout the country. But all who wish to derive benefit must become members as the organizations have all they can do to protect their members. The oftener dealers meet together and discuss their grievances and manner of doing business the better off they will be. This is especially true of the beginner, who can get much valuable information from the older dealers, which is worth a good deal of money to him. Railroads and dealers in the large cities who will not respect the rights of the individual shipper must and will respect the rights of an organization controlling the grain business of a state or number of states. And there should be a national organization besides the state associations, and the state organizations should be divided into districts.

"Organization by grain dealers is beneficial to the farming community either directly or indirectly, as the farmer will reap the benefit of increased prices which dealers are enabled to pay when the risks are lessened and when the grain is handled to the best possible advantage by systematic operations; he will get the benefit of just weights and grades in the markets, or as near just as they can be had.

"It is doubtful if any other legitimate business in the world is worked on as close a margin, considering the money invested and the risks run, as is the grain business of the country elevator owner. The public generally has a mistaken idea of the profits derived therefrom, which are usually largely overestimated. The farmer has rights; let them be justly considered; the dealer, also, has rights; let them be justly considered. Each depending on the other, let them work in harmony."

The firm of E. R. Ulrich & Son of Springfield is one of the largest in Central Illinois. It controls and operates elevators on the Wabash, Chicago & Alton, St. Louis, Chicago & St. Paul, Central Illinois and Jacksonville Southeastern railroads.

B. S. TYLER.

That the subject of this sketch has proven an efficient officer of the Illinois Grain Dealers' Association was made evident by his re-election to the office of secretary at the recent meeting at Decatur. Mr. Tyler was born in 1846, five miles east of Decatur, to which place his parents had moved from Kentucky. He followed farming until he was 24 years of age, teaching school during the winter months. In 1870 he took Horace Greeley's advice and went west to grow up with the country. He remained in the West until the spring of 1872 sowing great big crops of wild oats in season and out of season. Dry hot winds, the Hessian fly and and chinch bugs came along each year, however, and the sowings resulted in no profits. He returned to Macon County and resumed the business of farming at which he continued until 1878, when he engaged in a general mercantile and grain business at Casner. In 1883 he removed to Decatur, where he entered the employ of Pratt & Co. He afterward purchased an interest in the business which he sold to the firm in 1892 and purchased a line of elevators east of Decatur on the Vandalia, Peoria, Decatur & Evansville and Indianapolis, Decatur & Western Railroads. At this time he formed a partnership with Chas. N. Twadell, under the firm name of B. S. Tyler & Co. This firm still exists, and by honorable business methods has built up a large shipping business.

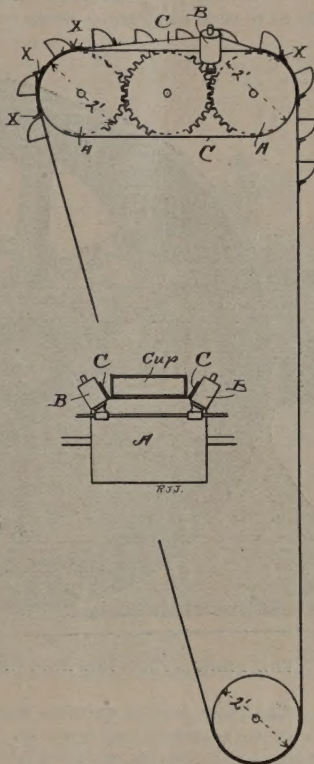
The new plan of gathering government crop statistics practically does away with the states agencies, as the states are grouped into districts, which only one state agent will supervise. The present system of county reports will also be supplanted by one providing for a reporter in every township, and the two systems will be used conjointly, each acting as a check on the other. The country will be divided into 21 districts. Fourteen of these will comprise groups of states and seven single states. Some of the state agents have been retained as district agents, and others will be dropped from the rolls.

A COMBINATION ELEVATOR HEAD.

Geo. M. Filstead of Erie, Pa., has been investigating grain handling machinery and has invented a new elevator head which he calls the Filstead Combination Elevator and Conveyor, a drawing of which is presented herewith.

The reference letters in the drawings of side views refer to the same parts. The wheels at A are placed on a horizontal line shaft. They are 2 feet in diameter and 8 inches wider than the bucket belt, which may be assumed to be 22 inches wide. The conveyor belt C, which runs around pulleys in elevator head only, should then be 30 inches wide and very lightly crowned on the face. The belt concentrators are shown at B; one or two sets of these may be used. The bucket guard X is used to carry the grain clear of the heel of the bucket as it passes over the delivery side and should stand 3 inches above the plane of the belt. The pulley in the elevator boot is 2 feet in diameter with a 2-foot face, and lightly crowned.

The inventor claims that with this style of head the bucket belt can be run at a speed of 1,200 feet per



FILSTEAD'S COMBINATION ELEVATOR HEAD.

minute. Instead of the grain being dumped 16 inches below the center of the head pulley it is dumped 6 inches above the center. The inventor claims that the head is so constructed that in new houses 4 feet can be saved in the height of the machinery floor. It is put in old houses by remodeling the head.

CONFLICTING REPORTS OF WHEAT AFLOAT.

For some reason not fully appreciated, various grain exchanges have not been able to get uniform information about so important a subject as stocks of wheat afloat for Europe each week from all sources. This seems due in part to unwillingness of some of them to co-operate, each preferring what it may choose to call its exclusive service. As a result the trade have the meteor-like voluntary cable contributions of some foreign grain publication, and the badly handicapped efforts of the new grain news service which the Western Union Telegraph Company has acquired.

This service, with all respect to those who use and pay for it, is unable to send some of the most important news each week to the wheat trade in this country until it has been given out to the clients of an older and, so far as one may judge by results, a better news service. Some one of these newer, but certainly not better, attempts to cover the grain producing, trading and transporting world sent word to American exchanges this week that stocks of wheat afloat for

Europe decreased 5,000,000 bushels. The world's stocks of wheat afloat for Europe last week, instead of decreasing 5,000,000, decreased only 2,000,000 bushels. About 12,000,000 bushels of wheat arrived in Europe and about 10,000,000 bushels were shipped to Europe last week.

The best of news agencies is likely to err at times, but such errors are of less importance than the employment of one who has not the facilities to do the work in competition with a fully equipped service. That seems to have been done.—Bradstreet's.

ANSWERS TO QUERIES ON INSECTS IN ELEVATORS.

BY PROF. W. G. JOHNSON, CHAMPAIGN, ILL.

I have the following letter from an Illinois grain dealer: "Can you give me any advice as to how to protect wheat in store from weevils, and how to disinfect bins from which wheat infested by weevils has been taken?"

In answer to this I would say that the bisulphide of carbon method is the most efficient remedy now known. The amount to be used can be easily estimated, as a pound and a half is sufficient for a ton of grain; or if used in an empty room or bin one pound will be enough for every 1,000 cubic feet of air space.

This substance is a very explosive liquid, extremely volatile, heavier than air, and should be used with great care. It can be obtained from Mr. Edward R. Taylor, manufacturing chemist, in 50 or 100 pound cans at about 10 cents per pound. It will be well to apply the bisulphide several times in badly infested bins at intervals of about two weeks, as many eggs and pupae would not be destroyed by one application. No time should be lost after a can of bisulphide has been opened, but the contents should be quickly scattered over the grain in the bins or set about in tin pans or other vessels, as the case may be, the doors and other openings tightly closed, and kept closed for ten or twelve hours.

This liquid can be poured directly on stored grains without any bad effects. It soon evaporates and penetrates every portion of an inclosure, killing every living creature with which it comes in contact if left for a sufficient length of time.

The spread of this pest can also be checked to a certain extent by thorough cleanliness, that is by constant sweeping and cleaning, and the destruction of all loose material that is liable to accumulate about a mill or elevator. As a rule well lighted and well ventilated buildings are less liable to attacks from these insects than dark, tight chambers.

[ANSWERS TO QUERIES TO BE CONTINUED.]

ABOVE AN EXPORT BASIS.

The Minnesota Railroad and Warehouse Commission has issued the following statement showing price of No. 1 hard wheat at Duluth, as compared with sale of 8,000 bushels Duluth No. 1 hard wheat made in Liverpool, June 22, 1895, for London delivery cost, insurance and freight or "delivered at the dock."

	Cents.
June 22, Price No. 1 hard in Duluth.....	73.00
Duluth elevator and inspection charges.....	00.85
Lake freight and insurance, Duluth to Buffalo.....	02.45
Buffalo elevator charges and commissions....	01.00
Canal freight and insurance, Buffalo to New York.....	02.00
Elevator charges in New York, viz.: Towing, demurrage, transferring, weighing and trimming.....	01.50
Ocean freight and insurance, New York to London.....	02.25
Shrinkage in weight, Duluth to London....	00.50
Cost in London, c. i. f.....	82.55
June 22, Sold in Liverpool for London delivery, 1,000 quarters (3,000 bushels) Duluth No. 1 hard wheat at 27 shillings 10½ pence per quarter of 480 pounds, or 83½ cents per bushel, say.....	83.62
Difference.....	01.07

Showing that on June 22 the price at Duluth was a trifle over one cent above a London export basis.

C. T. Wardlaw of Elliott, Ill., writes us: "You need not continue the ad. in the AMERICAN ELEVATOR AND GRAIN TRADE of elevators for sale. I have had plenty of applications through one insertion."

THE PIERCE GASOLINE ENGINE.

The Pierce Engine Company of Racine, Wis., is now manufacturing the Pierce Gasoline Engine, design of 1895, which is designed especially for elevator work. An illustration of this engine is presented herewith. The manufacturers call especial attention to its simplicity of construction, it having the least possible number of moving parts, and that it is made very heavy and substantial.

It will be noticed that the cylinder overhangs the frame, which is the same on all sizes of the engine, and it is said that by this method the cylinder always remains in line and all parts wear equal. The engine is built on the interchangeable plan, all parts being duplicated.

In its operation gasoline is fed directly from the tank in the ground to the cylinder. No carburetor or vaporizer is used, and the engine is said to run in the coldest and warmest weather equally well. It is equipped with an electric starter and igniter. A hot tube igniter is provided when desired without extra charge. After starting the engine requires no attention until stopped. It is always ready to run, and can be started in five seconds. As for the efficiency of the engine, the manufacturers guarantee to develop 1 horse power on one-tenth of a gallon of gasoline per hour or 14 feet of coal gas.

The Pierce Gas and Gasoline Engine is made to develop 1 to 15 horse power. The one shown in the cut is 2-horse power. It can be set up on either an iron subbase or brick foundation. The Pierce Engine Company has issued a new illustrated catalogue, showing different sizes of the engines, which will be sent to any one desiring information regarding a power plant.

LEGISLATION AGAINST FUTURES.

BY HENRY CROSBY EMERY, IN THE "POLITICAL SCIENCE QUARTERLY."

We are now in a position to examine more intelligently the arguments advanced in favor of anti-option legislation. [The name anti-option has been given to these bills because they have been bills for the taxation of "options" and "futures." Futures, as defined in the bills, are such contracts as have been spoken of above, for the delivery of a certain amount of a given commodity at a future time. Options is the word applied by the framers of these bills to what are more commonly known as "privileges." These are the familiar "puts" and "calls." They are contracts whereby one party acquires the right to receive or deliver the commodity, but is not obligated so to do. Some confusion has arisen from the fact that the word option is commonly used in business as synonymous with "future," because the seller generally has an option as to what day in the stipulated month he shall choose for delivery. The question of privileges, however, is of comparatively little importance. It is only with the question of futures that we are here concerned.] Such legislation aims primarily at suppressing the short-seller. In the Hatch and Washburn bills of 1892 the attack was made directly on the short-seller himself. It was the habitual and professional selling of what one did not possess that was held up as the evil to be suppressed. In the bills before the Fifty-third Congress the attitude taken was different. Mr. Hatch seemed to repudiate his old opinions, and now made the test to be the "absolute sale and actual delivery" of the commodity. The reasons for this change were not clearly given. The new measure seemed to allow short-selling, and so nominally "obviated all the objections to the former bill." But just what was aimed at is not clear. Suppose a grain dealer sells 50,000 bushels of wheat for forward delivery. It is resolved through a whole line of speculators till perhaps the twentieth buyer wants it for milling purposes. When the time for delivery arrives the elevator receipt may be sent through the whole line and cash paid on each

delivery. But it saves trouble if a "transferable order" is passed along by which the last buyer may claim delivery direct from the original seller. The others settle their "differences." This is actual delivery as much as the other. In either case nine-tenths of the business has been speculative, and one-tenth for trade. Suppose now the original seller has changed his mind and wants to "hedge" on his first contract, or that the first seller was himself merely speculating. The last speculator in the line, instead of selling to the miller, sells to him. This forms a circle and settlement is made by "ringing out." What difference in principle is there in the two forms? Evidently none. One had a fraction of real trading, whereas the other was perhaps all speculative. But in all exchange business the dealings for differences and the dealings by bona-fide traders are so mixed as to be undistinguishable. If Mr. Hatch only aims at prohibiting a particular form of settlement, he will merely obstruct the easy working of the system without touching the principle involved. All contrivances that facilitate transfers and obviate the cumbersome methods of cash payments are a distinct benefit to trade.

But the real aim of the new measures is the same as that of the old, and the arguments made for the bills of 1892 have been expected to do service for these

are simply an enormous additional supply forced on a market in which the other forces of demand and supply have already attained an equilibrium.

It is, however, easy to be misled by figures. These recorded "sales" simply give the amount of transactions. If a lot of 10,000 bushels of wheat passes through ten hands within a week or month, the total transactions are recorded as 100,000 bushels. And they are recorded as "sales" even if the eagerness of the buyers has caused a rapidly rising market. These figures in themselves evidently do not signify anything as to the actual supply.

It is insisted, however, that "illimitable" quantities of "fictitious" products are actually offered, and that these offers must reduce the price. The proposition seems eminently reasonable. There can be no doubt whatever that "illimitable supply" will break any market. But what has stopped the progress of the fall? The advocates of these measures have brought to their support the principle laid down by Tooke, that an increase in the supply of grain regularly results in a much more than proportional fall in price. Therefore, when the distinguished Senator whose bill was before Congress in 1892 shows that an amount of "fictitious wheat" fifteen times the actual wheat offered was poured into the market during that year,

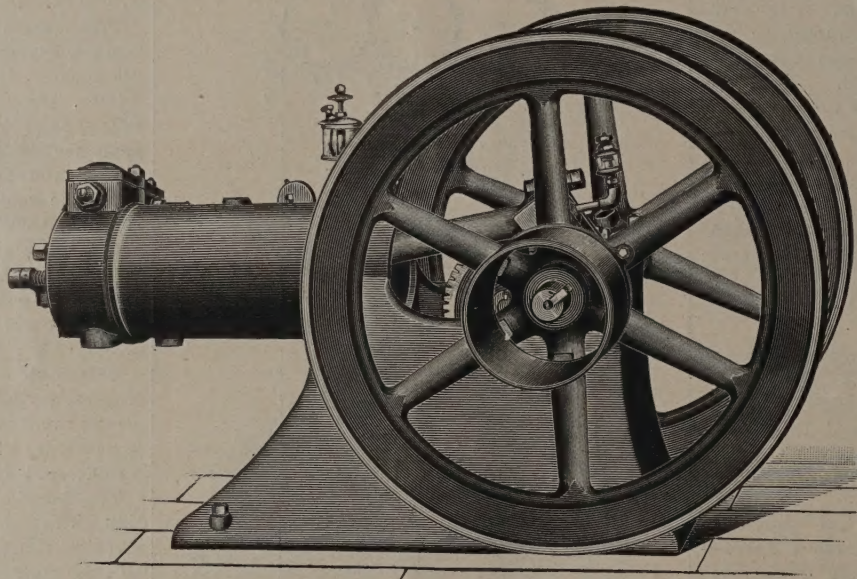
we look at once to the principle advanced and find that the price of wheat ought to stand at less than one cent a bushel. Still there can be no question of the validity of the principle itself; and the only explanation of this conclusion seems to be that the facts are not as stated. Certainly no one can seriously maintain that "illimitable" supplies of fictitious produce are, or can be, poured into the market by the short-seller. There is something that puts a limit on the supply and a check on the seller. What is it?

Again, let us consider the way in which the short seller pursues his "nefarious business." We are told again and again that he makes the price to suit himself, and robs the producer of enormous sums. The process is truly startling in its simplicity. The bears merely contract to sell an illimitable supply of (say) wheat; this forces prices down, and then they cover their contracts at the lower price. The price is bound

to go down; for if it shows any troublesome desire to maintain itself, they have only to keep on selling "wind" until the market breaks. Of course they reap the difference in price, and the more they have sold, the greater their profits. In this process the price apparently does not rise when the covering contracts are made. This is because, say some, the wheat which the shorts *buy* is based on real holdings; or, say others, because they cannot really secure and deliver all the wheat, and so simply settle the contracts at the market price; or because on general principles "the long-buyer is a less potent factor in the market than the short-seller." Whatever the cause, here is the fact, a sure and safe method of selling at one price, depressing the market, and buying in at a lower price, scoring the consequent profit. With a description of this process as his *vade mecum*, the way of the speculator is easy and his profits far from light.

The legislators who see so clearly how they might thus take unto themselves the "hard-earned substance of the farmer" may seem to show a most praiseworthy self abnegation in exposing the method and attempting to make it unlawful. But the men who have put this system into practice present a curious contrast to what we might expect of those who should take advantage of such a scheme. Of the many who have sold farm products short, not one in a hundred has grown rich; and even those who have been more or less successful do not show the boldness of men who have a "sure thing," with nothing to fear. If prices remain firm, these men do not rush in deeper and deeper, but draw out with all possible dispatch. What is it, then, that men possessed of such "complete power over the market" have to fear?

Something has evidently been left out of account in



THE PIERCE GASOLINE ENGINE.

later ones. That this is so is seen by the most cursory glance at the speeches, and especially at the committee reports in favor of the bills. The wording is changed somewhat, but the real motive is the same. Though short-selling for business purposes has been admitted to be a necessity, the great extension of the system in the hands of professional speculators is still the point of attack, as being destructive of the welfare of the producing class. If this contention is not true, there is no more reason for passing the later bills than for passing the bill of 1892. The issue then resolves itself into the question of the use of the short-seller in the organization of business.

According to the theory of speculation in the first part of this paper, short-selling is the last step in the development of a much needed machinery for the determination of future prices according to all the market conditions present and future. The short-seller represents the forces of supply, and can only represent a future supply by a present speculative supply. But apart from the nominal object of raising revenue, the first object of the Hatch Bill of 1892, as laid down in the report of the committee on agriculture, was "to relieve the producer of the destructive competition to which he is now subjected by the offering upon the exchanges of illimitable quantities of flat or fictitious products by those who do not own, and have not acquired the right to the future possession of, the articles which they pretend to offer and sell," or, as it is stated in the report on the bill of 1894, "by those who do not intend to, and cannot, terminate the contract by actual delivery of the articles which they pretend to offer and sell." In either case the fundamental assumption is, that the great quantity of recorded sales, which perhaps aggregate many times the crop raised,

this theory—something that keeps the price from falling below a certain point, despite the illimitableness of the supply, and that casts a shadow over the pathway of the covetous bear. The common answer to the charge that short-sales depress the price is, that every sale means a purchase, and that there is a speculative demand to meet the speculative supply; and the common idea has always been that the thing that makes the bear so nervous is the bull.

This proposition is greeted with ridicule by the anti-optionists, as "one of the oldest gags in the argument of the whole question." But they meet it with reasoning as well as with ridicule. They are doubtless right in denying that because the seller implies the buyer, and for every sale there is a purchase, *therefore* the contending forces are equal, and short-selling is always equalized by long-buying. The number of buyers depends, of course, upon the price, and buyers will be forthcoming if the price falls far enough. So, too, they are right in saying that the price may be depressed by a multitude of unaccepted offers. But though the increase of speculative supply, like the increase of real supply, may depress the price, the question whether it does so depends upon the strength of the demand. The assumption of the advocates of these measures is, that the demand depends for its strength solely on consumers and "real traders." That this is not the case is evident from the fact that prices have not fallen to an unlimited extent. As soon as the price falls to the point where speculators think it is below what the actual price is going to be, these speculators come in and buy. The bears cannot continue to sell "wind" indefinitely; for the purchasers become equally eager, and their purchases raise the price. Men are just as ready to make money from a rising as from a falling market. As a matter of fact, then, we see that there is a great fictitious demand to meet the fictitious supply, and the cause of the bear's fear is, after all, the bull.

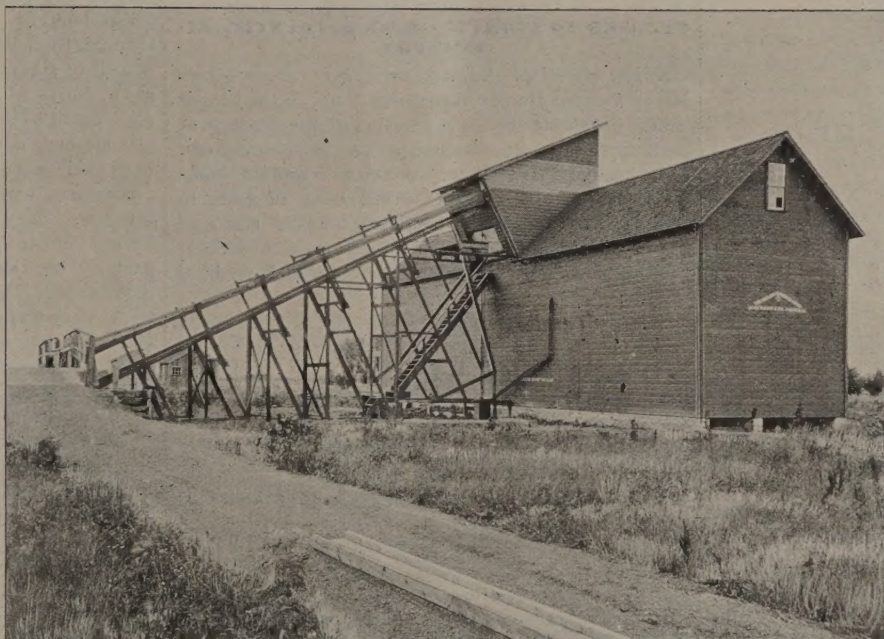
When the Senator from Minnesota, then, argues that the short-seller can of himself depress the price, whereas the owner of the property can only advance the price with the consent of the buyer, and that therefore "the 'long' is a far less potent factor in advancing prices than the 'short' in depressing them;" or that, "in other words, one man may and does put the price down, whereas it requires the concurrent action of at least two people to advance the price"—he does not meet the point at all. It is not the owner that opposes the short. It is the speculative buyer. The latter does not have to wait for anyone any more than does the speculative seller. He can and does go into the market, bid for large quantities of the product, and thereby raise the price by his own efforts, exactly as the short-seller, by offering similar amounts, seeks with more or less success to depress the price.

Again, when the Senator argues in the next place that, even if the seller implies the buyer, prices are not determined by such offers, because they are often manufactured by "wash sales," he says nothing of the fact that such sales may be used to advance the price. Nothing too severe can be said of the practice of "wash sales;" but they are no more an instrument of the bear than of the bull.

And when, in the third place, Senator Washburn holds that the "fictitious" buyer is no support to the market, because he buys not actual commodities, but merely "contracts;" and is really a destructive influence, because at the approach of the time for delivery he rushes to get rid of his "contracts," and breaks the market by his liquidation—a similar contradiction is involved. In the first place, one is inclined to wonder why, if the short-seller cannot possibly deliver on his contracts, as we are so vigorously told, and would

be in a deplorable state if delivery were demanded—why under such circumstances the buyer is so afraid that such delivery will take place and is so anxious to liquidate before the occasion arrives. But apart from this, it is evident that what is said of the long-buyer is equally true of the short-seller on the other side of the market. It makes little difference for this argument whether fictitious buying and selling have the same effect upon the market as real buying and selling or not; but surely the distinguished Senator cannot hold that fictitious selling does have the same effect, as he maintains in denouncing the competition of the short-seller, and that fictitious buying does not, as he maintains in denouncing the influence of the long-buyer. In any case, what is true of the one is true of the other. If the anxiety of the long-buyer sometimes makes him a depressing influence, so the anxiety of the short seller sometimes makes him an influence for the advance of prices. It is true that nothing will force prices down like a stampede of bulls in a rush to liquidate; but it is equally true that nothing will send prices up like a rush of frightened bears to cover their short-contracts.

That the short-seller does not control the market is



ELEVATOR AND DUMP OF LEON EUZIERE AT TUCKER, ILL.

further made evident by the fact that prices of farm products rise and fall quite independently of the amount of fictitious transactions. If the influence of these transactions is on the whole to depress the market, the greater the amount of dealings, the lower ought the price to stand. But no such correspondence exists at all. Take, for example, the figures of three consecutive years, which illustrate what is true of the whole period since short-selling was instituted:

WHEAT FUTURES SOLD ON NEW YORK PRODUCE EXCHANGE.		
	Bushels.	Average price per year.
1891.....	1,604,450,000	\$1.08
1892.....	1,079,713,500	0.89%
1893.....	972,670,000	0.72%

The same is true of monthly and weekly sales and prices. The extension of fictitious dealings is seen to be in no way connected with a fall in price.

[TO BE CONTINUED.]

R. G. Risser, president of the R. G. & C. H. Risser Company, dealers in grain at Kankakee, Ill., writes us: "Please send the February and June numbers of the AMERICAN ELEVATOR AND GRAIN TRADE; both of these issues are lacking to complete our files. Your journal contains valuable information and we cannot get along without it."

The Fair wheat bought by a San Francisco syndicate is being loaded at Port Costa. Before buying the wheat the shrewd syndicate chartered all the vessels in port for six months and got it for \$17 per ton. Now it will take till August to load the wheat, and there is no storage available at San Francisco for the new crop. Farmers say it's all a scheme to keep wheat down.

ELEVATOR AND DUMP OF LEON EUZIERE AT TUCKER, ILL.

The accompanying illustration represents an incline elevator and dump built by H. Kurtz & Son for Leon Euziere at Tucker, Ill. The elevator was built according to the plans of H. Kurtz & Son, who make a specialty of this style of elevator. It has a capacity of 20,000 bushels with a shipping bin of 5,000 bushels' capacity. Grain is elevated by the incline elevator and dump to a height of 33 feet.

Mr. Euziere is an experienced and successful grain dealer and has been engaged in the business for the past 30 years. He handles more than 500,000 bushels of grain annually. For two consecutive days in the fall of 1894 he received 20,000 bushels of grain. He has operated his elevator since last September and has elevated the car containing 100 bushels of shelled corn with one 1,300 pound horse. For two horses its draft is exceedingly light. Mr. Euziere's farmer patrons are well pleased with the plan of the incline elevator and dump. The manufacturers claim for it great economy when the investment is considered in connection with the saving in expenses subsequent to its

being placed in operation. It is a very rapid method of elevating grain and by its use ear corn can be placed in a car or crib as conveniently as shelled corn.

The overhead car system is said to be a great success. The ventilated combination bin is convenient and is attracting considerable attention. It is especially designed for the storage of ear corn. In every instance when the elevator has been used it has invariably accomplished all that its manufacturers claim for it.

CONSUMPTION PER CAPITA.

The *Prairie Farmer* has published an article claiming that the consumption of wheat in the United States, as the result of an investigation, does not exceed $4\frac{1}{2}$ bushels per capita. The consumption heretofore has been estimated at about $4\frac{1}{2}$ bushels, which was

supposed to include all wheat which was indirectly used in manufacturing and all other purposes.

If the *Prairie Farmer's* calculation is intended to apply only to the consumption for human food, and the remarks refer only to that subject, then the calculation is somewhat misleading. It should be remembered that the wheat crop of the United States is reported in *measured* bushels, and there is a shrinkage of about one-twentieth in that portion used for commercial purposes. In addition, there is a large quantity of flour used in the production of bread, biscuit, crackers, etc. (not included in exports of flour and wheat), also in the manufacture of cardboard, in book-binding, paper hanging, sizing cotton cloth, etc. Besides this, there is a large quantity of poor, shriveled wheat which is fed to poultry. It is safe to calculate that at least 25,000,000 bushels of wheat are used in various ways in the United States outside of the quantity required for human food, which is equal to about three-eighths of a bushel per capita, making the aggregate consumption about $4\frac{1}{2}$ bushels, accepting the *Prairie Farmer's* calculation for human food. —*Trade Bulletin.*

The new classification and freight rates ordered by the Illinois Railroad and Warehouse Commission went into effect July 1. The rates on more than 1,200 articles, including cereal products, are reduced.

The Kansas City, Kan., Board of Trade reports the following amounts of grain inspected during the month of June: Wheat, 247 cars; corn, 137 cars, and oats, 105 cars. The new wheat is arriving and a large increase for July is expected.

A REGULAR DEALER'S DREAM.



A regular dealer calmly sleeping,
 Dreaming of prices upward creeping;
 An established buyer, old was he,
 And he paid fair prices honestly.
 But a nightmare mingled with his dreams,
 A horrible figure at him gleams.
 He wildly threw his arms about,
 With piercing cries began to shout.
 For the man-with-a-scoop was standing by,
 With bristling hair and scheming eye.
 He is the regular dealers' foe.
 By unfair means his profits grow.
 He carries his office in his hat;
 No taxes nor rent he pays for that.
 An irregular buyer, bold is he,
 And he carries on business craftily.
 For storage or help he has no expense,
 And he helps support no government.
 No demurrage pays this artful jay,
 Nor waits he for cars a single day.
 He shovels his grain into cars direct
 And his scoop always measures his grain correct.
 He wants all the hay, grain and seeds,
 A scoop and nerve are his only needs.
 When grain is rushing to market he buys,
 At other times he dormant lies.
 This is the horrible nightmare
 Which drives the dealer to despair,
 But in his dream, it's all too true,
 The horrible monster will have his due.
 When he meets him on the highway
 He no longer fears his bold display,
 But plans to drive this cheap intruder
 From every mart of the regular dealer.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade, or all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

SHIPPING AT TACOMA.

Editor American Elevator and Grain Trade:—According to the report of the harbor-master of the port of Tacoma, Wash., for the month of May, the total exportation of breadstuffs was as follows: Wheat, 177,962 bushels, valued at \$103,200. The inward registered tonnage was 46,090 tons; outward registered tonnage 44,637 tons; inward cargoes, 4,868 tons; outward cargoes, 47,502 tons. Deep sea arrivals, 30; departures, 33.

SAMUEL COLLYER,
 Secretary Chamber of Commerce.

Tacoma, Wash.

ADVANTAGES OF CENTAL WOULD BE PERMANENT.

Editor American Elevator and Grain Trade:—While some temporary confusion would undoubtedly attend a change in the standard of measure from the bushel to the cental, the advantages would be far-reaching and permanent. It is true additional burdens would be imposed upon statistical work generally by a change in the basis of comparison, but that, in my opinion, is merely an incident, and should not be allowed to interfere with any movement that will facilitate commercial transactions.

Statistics exist to further the interests of trade, and

the latter can hardly be expected to accommodate itself to the convenience of statistics, important as they are. The question should be considered on the broad general grounds of whether the change will facilitate trade. I believe the tendency of the times is toward a simplification of measures of quantity and of value throughout the world, and the change under discussion seems to be in line with this general movement.

Yours respectfully, ELWYN G. PRESTON,
 Secretary Chamber of Commerce.

Boston, Mass.

SUGGESTS A PLACE FOR INAUGURATING USE OF CENTAL.

Editor American Elevator and Grain Trade:—Referring again to the question of the cental vs. the bushel, it occurs to me that nowhere could the desirable change to the cental system better be inaugurated than in the United States statistical departments. On the Pacific Coast, where we clear everything in centals, the absurdity of the custom house authorities changing these figures to bushels for statistical purposes is painfully apparent.

Yours very truly, T. C. FRIEDLANDER,
 Secretary Produce Exchange.
 San Francisco, Cal.

OPPOSED TO STORING GRAIN IN COUNTRY ELEVATORS.

Editor American Elevator and Grain Trade:—Last March Senator Dunlap introduced a bill in the Illinois Senate providing for the regulation of the storage of grain in country warehouses, penalty for removal, etc. It is headed, "A bill for an act to regulate warehouses of class B, and the warehousing of grain in the same, and to provide penalties for the removal, sale or mortgaging of grain stored therein without consent of the lawful owners thereof," and reads as follows:

SECTION 1. Be it enacted by the People of the State of Illinois, represented in the General Assembly, That it shall be unlawful for the proprietor, lessee or manager of any warehouse, elevator or granary of class B, embracing warehouses, elevators and granaries in which grain is stored in bulk, and in which the grain of different owners is mixed together, to remove, sell, mortgage or otherwise dispose of any grain received and held in store in such warehouse, elevator or granary, except by and with the consent of the owner or owners of said grain.

SEC. 2. Any proprietor, lessee or manager of such warehouse, elevator or granary who shall violate the provisions of this act shall be liable to the owner or owners of said grain for the full value thereof, together with damages sustained on account of such unlawful disposal, and shall forfeit unto the owner or owners of such grain all charges for storage thereon.

SEC. 3. Any proprietor, lessee or manager of any warehouse, elevator or granary of class B who shall violate the provisions of this act shall be deemed guilty of a misdemeanor, and, upon conviction, shall be fined not less than fifty dollars (\$50) nor more than five hundred dollars (\$500), imprisoned in the county jail for not less than thirty days nor more than one year, or both, in the discretion of the court: *Provided, however,* that it shall not be necessary for such proprietor, lessee or manager to preserve the identity of such stored grain, but that he may sell or remove such stored grain if he shall at all times have in his possession an equal amount of grain of the same kind and quality as the grain received in store and free from incumbrance.

The bill was referred to the Committee on Warehouses, which reported the bill in April with the following amendments:

"Amend by striking out of section 3, line 4, the word 'or,' and insert the word 'and.'

"Amend by striking out of section 3 the words 'less than thirty days,' and the words 'or both in the discretion of the court.'"

One of the greatest hindrances to the country grain trade is the storage of grain for customers and permitting farmers to utilize most all of the bin room in our country elevators to the detriment of grain belonging to the elevator proprietors. If they crowd their elevators their own business cannot be properly conducted without additional expense. Often the elevator proprietor ships his own grain out on a weak market because he cannot make room for his own and his customers'.

Senator Dunlap has asked my opinion of the bill. I have replied that I am in favor of anything that will discourage the storing of grain in country elevators. Perhaps to make it a penal offense to both farmers

and elevator proprietors would be a good thing. A padded cell in the Kankakee Asylum is the proper home for some grain men from a storage basis standpoint, as there is absolutely no business idea to their method.

Yours respectfully, R. G. RISSE.
 Kankakee, Ill.

CHANGE IN GRAIN MEASURES NEEDED.

Editor American Elevator and Grain Trade:—It is surprising that some intelligent men actively engaged in the grain business still insist upon the retention of the bushel as the unit of measure. It seems to me that every objection to a change to the cental unit has been met and answered. Board of trade men who object to a change plead the great work that would be necessary in changing statistics already existing. For my part I cannot comprehend why it is more economical to keep piling up statistics of the same kind which must one day be changed to accord with new standards. Or do those who object to a change expect that the bushel will always be used? One would believe so from their argument.

Custom houses and great importing houses are compelled, on account of the diversity of weights, measures and moneys with which they have to deal, to employ an immense staff of computers to effect transformations of values of commodities which pass through their hands. The trade pays their salaries. Boards of trade are compelled to employ a large number of clerks who compile statistics, which, no one denies, could be done much cheaper by employing simpler methods and a larger unit of measure. The trade pays their salaries.

Some say it would be difficult to bring the cental into use. They seem to overlook the fact that the French metric system has been adopted, wholly or in part, by all the greatest civilized countries on the globe except England and the United States. Before the system was adopted in France excessive diversity and confusion of weights and measures existed. Each city had its own custom and standards. It was not an easy thing to destroy these different units of measure and establish others. People said it was impossible, which of course was very stupid of them, just as it is for those who try to hide the light of reason under a bushel in this country to-day.

A change of system of weights and measures is not of itself a good thing, but where trade is anywhere hampered with clumsy or useless measures a change becomes necessary. The universal adoption of a decimal system of weights and measures is inevitable and is only a question of time. A change may soon be expected in England. The trade there is beginning to realize that when there are over 200 measures for wheat, there must be about 200 wrong ways of selling wheat; that there must be something wrong about a bushel of wheat weighing 62 pounds in Gloucestershire, 70 pounds in Monmouth, and 80 pounds in Newtown, and a bushel of potatoes weighing 84 pounds in Nottinghamshire and 224 pounds in Cornwall. No wonder there is a strong movement on foot for a change of all this rubbish to a metric system, and that there are signs of such being adopted.

To be sure there is less need for a change to the metric system in the United States; otherwise it would have been adopted long ago. But I do believe that the grain trade needs the cental system of weights and measures. Part of the country already uses it; part of the whole trade uses it; would they change back to the bushel? The rest of the country must use it; why not at once? Why do not our boards of trade, our magnificent commercial bodies, take action in this movement? Do they not know that the days when a trader carried one set of weights to buy with and one to sell with are gone? that no more, as in the New York of Dietrich Knickerbocker's time, does "every Dutchman's hand weigh a pound and every Dutchman's foot weigh two pounds?" Five hundred years before Solomon, one of the prophets prayed to be "weighed in an even balance," and I humbly second the motion.

F. R. PROGRESS.

A return relative to inspection of grain at Fort William, Man., shows that in 1890 the fees for inspection amounted to \$2,505. In 1891 they jumped up to \$7,194. In 1892, \$8,104; in 1893, \$8,204, and in 1894 they reached the sum of \$10,910.24.

ABOUT TRACK SCALE WEIGHING.

BY J. A. DEMUTH.

Ten or twelve years ago I invented a device which enlisted my keenest interest in the matter of elevator weights. As the four scales in the elevators where I was employed were supplied with my device, I naturally watched with special interest the result of our weighing in comparison with grain that had been billed to us at track-scale weights from stations on our road and elsewhere. The stations on our own road where track scales were used were required in waybilling to us to note the gross, tare and net weights. There were comparatively few stations, however, which used track scales, the majority of grain houses using small hopper scales. There were, however, a number of stations on tributary roads which used track scales at the shipping points, and in other cases all grain coming to us had been previously weighed on track scales at the regular weighing station of the tributary. For instance, all grain coming from stations on the G. R. & I. Ry. beyond Ft. Wayne was reweighed at Ft. Wayne on the G. R. & I. scales. The waybill was corrected in red ink, both weights and charges. This always seemed to me a senseless piece of business, as the stenciled weight of the car was used. We, of course, paid no attention to these corrections, as the grain was subject to weight at destination. We placed no reliance on their gross weights even, because we knew something of "yard weighing."

There were many of the freight clerks (who were bothered a good deal by corrections in weights "back and forth") who were of the same opinion as myself, that is, that much of the yard weighing was little better than yard guessing. To illustrate, let me copy from my memorandum:

Jan. 6, '88. This A. M. heard C— 'phoning his yardman about weight of car woodenware from Swan Creek Ry. December 27. Told his man to look it over carefully and see if he hadn't make a mistake. The man looked carefully and said he hadn't. C— yelled back that shippers claimed the gross weight should be 44,000 odd hundred instead of 54,000 odd hundred. (If this had been grain they would have paid the extra freight without a murmur.) But the man had looked carefully and said his weights were correct. All the same C— decided that his weights were *not* correct, and so cut the shipment down 10,000 pounds. Query—Who was right?

Another interesting case in which the above mentioned "C—" was himself pinned down was one in which the agent himself was "following up" an error. C— had set up the weights of a lot of iron from 16,000 to 24,000. C— (over the 'phone) knew it was all right, 'cause he weighed that car himself. To settle it the iron was weighed on platform scales in the freight house and weighed less than 17,000 pounds. C— couldn't see how he had made the mistake. Several of the freight clerks were of the opinion that that was only another car that C— had weighed in his mind instead of on the yard scales.

Another instance of yard guessing: A car of oats from Morenci, weighed in on platform scales in drafts of about 1,000 pounds, was weighed in Toledo yards as follows: Gross 42,150, tare 18,650, net 23,500. As 24,000 was the minimum, the waybill was corrected and freight charges re-extended on 24,000. Morenci's weights were 32,512 net, a difference between Toledo corrected weights and shipping point of 9,012 pounds. The car was billed through to Baker Bros., Philadelphia. It was again weighed at East Buffalo by N. Y. C. R. R. and a correction sent by them to Toledo, where the grain had been re-billed, making net weights 33,250, a difference between Morenci and East Buffalo of 738 pounds. Of course the grain was again weighed at destination, and I have no doubt the Lord knew at the time just how much, but we never heard of the oats again. Who was right? Probably Morenci. If the car was actually weighed at Toledo the weighman made an error in reading or recording of 10,000 pounds.

I will give one more example (I have hundreds of them in the memorandum book to which I am referring) of the careless handling of track scales, and then I wish to show a list of weights from different stations which will prove that track scales are usually fairly reliable where they are carefully handled.

Out of 120 cars received at our elevators from Lansing 20 were *over* from 10 to 100 pounds; 12 from 100

to 200 pounds; 6 from 200 to 260 pounds; 33 were short from 10 to 100 pounds; 30 were short from 100 to 200; 7 from 200 to 270. Average surplus per car, 107 pounds; average shortage, 105 pounds. Fifty-three cars weighed out (over or short) within 100 pounds; 42 within 200; 13 within 270; 4 exactly as billed, and there were 17 cars in error. Of these errors 3 were of 500 pounds; 4 of 1,000 pounds; 1 of 2,000 pounds; 1 of 5,000 pounds. Our scales and Lansing's had 500-pound notches, under which there were no figures, the figures being stamped under every other notch—that is, under even thousands. The following example will show my method of establishing the exact amount of the error in each case:

1886—October 9, W. B. 243.	
Lansing, gross.....48,300	Lansing, net.....28,300
Toledo, gross.....49,360	Toledo, net.....29,270
	1,060
Lansing, tare..20,000	970
Toledo, tare..20,090	A usual difference.. 30
	1,000

It is very plain from the above that the Lansing weighman should have read 49,300 instead of 48,300.

To prove that this reading of the figures to the right or left of the figures indicated by the poise on the beam is a prolific source of errors, I give below one example of a great many errors made by our own weighmen, and of which I have kept a record. The errors made by our own weighmen were detected and corrected by means of the double entry system, which had at that time been recently introduced:

1886—March 16—Car 3373.	Tare weight.
Weighman's record in figures.....20,200	
Weighman's double entry record in letters.....21,200	
Weighman's error	1,000

Now in nearly all cases the record in double entry of letters was still further proved by the billed weights of the shipper. For example: October 21, '88, car 1028, from Angola—

Our weighman's record in figures, gross	54,710
Our weighman's double entry in letters, gross	44,710

Error in favor of shipper.....	10,000
Shipper's net weight, billed at Angola.....	26,880
Toledo net, using corrected gross	26,810

From the foregoing, which are taken almost at random from a long list of errors, it is very apparent that the reliability of track scales, as, indeed, of all sorts of scales, cannot be considered apart from the question of accurate weighing and accurate reading and recording of weights. The notion is altogether too prevalent among the owners of scales of approved makes that they are fortified against inaccurate weighing because they have a first-class scale. Here is an example:

The agent at Lansing (W. B. 365, May 15, 1886) shipped us a car of wheat billed at 29,700 net; our corrected net weight, 34,610. If we consider 90 pounds as a not unusual shortage, the exact difference between our weights and Lansing's is a clean 5,000 pounds. As soon as I discovered this discrepancy I telegraphed Lansing for his gross and tare, he having neglected to note the same on his waybill, and asked him if he was sure his weights were correct. He answered, suspecting, of course, that his car had fallen short: "Car, my W. B. 365, is correct as weighed on track scales. My scale is new and correct." With our double entry of weights we were positive our weights were correct, and so gave him credit for 5,000 pounds more than he claimed. He accepted our correction, but said his "cleaning out" (weighing over) would prove whether he had made the mistake or not. Well, the cleaning out showed Lansing short 1,130 pounds of wheat, which amount would have been precisely 6,130 if the above car had gone to some Eastern point.

As I have said, we had in our elevators at Toledo four track scales. These scales were tested three times a week by weighing a heavily loaded car on all four scales in succession. Out of the four perhaps two would give the same weight within 10 pounds. But in order to bring the weights as close together as possible, it was necessary to take plenty of time in balancing the beam. Rapid weighing on a track scale is some better than guessing, but not much. There was hardly ever a time when all of the scales weighed the same, there being a difference of from 20 to 60 pounds. No one seemed to be able to account for these differences. But, as I have said, it required the

most careful weighing to obtain even as close results—much more careful and deliberate balancing than was customary when weighing in the regular course of business.

The difficulty we were continually having with shippers in regard to weights impelled me to give the matter of differences in weights of track scales especially the closest attention. In order to assure myself that the differences between Lansing's weights and our own were not caused by careless weighing on Lansing's part, knowing, as he did, that Toledo's corrections would tend to make the results of his weighing over more difficult to explain, I kept a record of 167 cars received from Fostoria, a station on the L. E. & W. Ry., and the following is a summary of the weights: Sixty-six were over from 10 to 100 pounds; 10 from 100 to 200 pounds; 2 from 200 to 270; 49 were short from 10 to 100; 18 from 100 to 200; 5 from 200 to 300. Average surplus per car, 58 pounds; average shortage, 75 pounds. One hundred and fifteen cars weighed out within 100; 28 within 200; 7 within 300; 6 as billed, and 11 in error. Of these errors 3 were 1,000 pounds; 2 were 500 and 2 were 3,000 each. The others were probably 500-pound errors. The 3,000-pound errors were both over at our elevator. In investigating these I learned that some of the grain was loaded at an elevator where a 50-bushel hopper scale was used, so that in all probability these 3,000-pound errors were caused by their failing to tally one hopperful. Mistakes of this kind happened at stations on our own road, where we were operating grain houses almost every day.

It is useless to discuss the "Reliability of Track Scales for Country Shippers" without taking into account the careless handling of scales. I have searched diligently, high and low, among all the stations whose shipments were tributary to our elevators, to discover one station whose weights should run close enough to ours to prove the reliability of our weights. While I was quite sure our weights were free of errors, I failed to find one station where weights were uniformly close to ours. Why? Because weighing is usually done by men who load and handle cars. This is not the case in large terminal elevators, where expert weighmen are employed, and it is not always the case with shippers; but the presumption is too general that anybody can weigh a car of grain, that it is a very easy thing to do, when the fact is that it calls for extreme care and a clear head.

In my next paper I will give a number of comparative tables of weights, together with my theory as to some of the differences. I confess that some of them have always been a puzzle to me. Perhaps someone else may be able to offer a solution. From this set of figures I think, however, I shall be able to prove at least two things in the way of a solution: First, the untenableness of the "Robbery" theory, and, second, the absolute certainty of errors, here, there and everywhere.

[TO BE CONTINUED.]

J. L. Killian, a farmer of Vansycle, Umatilla Co., Ore., reports that ground squirrels are destroying hundreds of acres of grain.

The first car of wheat of this year's crop reached Chicago June 28. It came from Carbondale, Ill., graded No. 3 Red, and sold for 68 cents free on board cars. The first arrival of new wheat last year was July 11, showing the season to be about two weeks earlier.

A rainfall of 1.84 inches occurred at Wichita, Kan., June 9, the alleged result of a series of rain making tests instituted by an organization of business men of Wichita. The rain extended south, including all of the strip and Northern Texas and west in Kansas beyond Sterling.

According to statistics compiled by the Chicago *Trade Bulletin* the supply of wheat in farmers' hands in the United States on July 1 amounted to 31,095,000 bushels against 40,100,000 bushels July 1, 1894. This calculation is intended to cover all wheat in farmers' hands, not that which they may merely have for sale, and the deductions are made on the basis of the Department of Agriculture returns of the crop of 1894—460,000,000 bushels—and an allowance of 40,000,000 bushels in farmers' hands on July 1, 1894, a total supply of 500,000,000 bushels.



S. T. Wiedenbeck may erect a brewery at Boise, Iowa.

A brewery is being erected at Brandon, Man., by Mr. Kaller.

Zoller Bros. will erect a \$35,000 malt house at Davenport, Iowa.

A. D. Davis has erected a new brewery at Bridgeport, Conn.

Chas. W. Specht has erected a new brewery at Barberton, Ohio.

The C. Birkhofer Brewing Company's new brewery at Minneapolis is completed.

Walli Heid has bought out the Muench Brewing Company at Milwaukee, Wis.

C. M. Conrad's brewing plant at Erie, Pa., is undergoing extensive improvements.

The Ehrhardt Brewing Company of Massillon, Ohio, will erect a new brewery.

Henry Schwalbach has purchased Ignatz Koch's brewing business at Appleton, Wis.

C. H. Kramm has succeeded the firm of Kramm & Warnholz, brewers of Oakland, Cal.

H. S. Mizner has been appointed receiver of the Knoxville (Tenn.) Brewing Company.

The L. Bergdoll Brewing Company will make alterations to its malt house at Philadelphia.

The Highland Brewing Company has succeeded Kahnbach & Geisel at Springfield, Mass.

The City Brewing Company has succeeded to Kolter & Koch's business at Wapakoneta, Ohio.

The Mobile (Ala.) Brewing Company has sold out, and the purchasers will improve the plant.

Receivers have been appointed for the Huntington Brewing Company of Central City, W. Va.

R. C. Osterhout has succeeded to the brewing business at Reading, Pa., of E. H. Gaul, Agent

The L. Brosemer Brewing Company has succeeded to the estate of L. Brosemer at Oswego, N. Y.

Crezentia Gehling has succeeded to the brewing business of Michael Gehling at Fall City, Neb.

The Union Brewing Company has succeeded the Vogt & Sweeny Brewing Company at Chicago.

John F. Dornfeld of Chicago, Ill., has been granted a patent for a malt turning and stirring machine.

The plant of the L. Hoster Brewing Company at Columbus, Ohio, is being remodeled and improved.

W. P. Mirick is erecting a malt house at Lyons, N. Y., to replace the one recently destroyed by fire.

Majer & Zoblein, brewers of Los Angeles, Cal., intend to erect an addition to their plant to cost \$50,000.

Improvements will be made to the Svagdrack Brewing Company's plant at Marinette, Wis., to cost \$2,000.

The Streator Brewing Company has been incorporated at Streator, Ill., with a capital stock of \$50,000.

The Wheeling Brewing Company has been incorporated at Wheeling, Ill., with a capital stock of \$50,000.

The Rhode Island Brewing Company will build an iron and brick storehouse at its plant at Providence, R. I.

The Kuebler Brewing and Malting Company, Sandusky, Ohio, will erect a brewhouse, storehouse and office.

Charles Kaestner & Co. will rebuild their 6 story factory at 241 to 247 S. Jefferson street, Chicago. There will be two buildings, one having an area of 93x93 feet

and the other a frontage of 236 feet and a depth of 93 feet. The cost is estimated to be \$160,000.

The E. B. Parsons Malting Company of Rochester, N. Y., intend to erect an elevator for barley at Sodus Point.

The Central City Brewery at Stevens Point, Wis., was destroyed by fire June 28. Loss, \$10,000; partly insured.

The Blue Island Brewing Company has been incorporated at Blue Island, Ill., with a capital stock of \$100,000.

Bowler Bros., brewers of Worcester, Mass., have reorganized under the firm name of Bowler Bros., Limited.

Heiselman & Spieder have leased a building at Kingston, N. Y., which they will remodel to a brewery.

John Haas is going to start in the brewing business at Sturgis, Mich., after moving part of his plant from Hillsdale.

The Phil. Scheurmann Brewing Company's plant at Marquette, Mich., is being thoroughly overhauled and modernized.

The William Rahr's Sons Company will erect a malt house and other improvements at Manitowoc, Wis., to cost \$100,000.

S. K. Nester recently purchased the Gibson Malt House at Waterloo, N. Y., and it will receive extensive repairs and be enlarged.

William McMeekin recently sustained a loss to his brewery at Prineville, Ore., to the extent of \$500. There was no insurance.

The Rock Island Brewing Company of Rock Island, Ill., has begun the erection of a brick and iron storage house as an addition to its plant.

The Chas. D. Kair Brewery at Mahanoy City, Pa., recently sustained damage by fire amounting to \$1,500, which was covered by insurance.

C. H. Munzinger has taken a partner in his brewing business at Milwaukee, Wis., the company's firm name being Munzinger & Gerlinger.

The American Brewing Company of Chicago and other cities has secured 105 acres at Chautauqua, N. Y., and will erect a large brewing plant.

The bill introduced into the Illinois State Legislature prohibiting the sale of beer made of other material than malt and hops failed to become a law.

The new brewery building of the Davenport (Iowa) Malting Company is completed. The old malt house has been remodeled and raised another story in the center.

It is said that Eastern brewers are advocating an additional tax of \$1 per barrel on malt liquors, in order to be able to compete with the Western trade which ships so much of its product East.

George Bullen has retired from the firm of George Bullen & Co., the well-known maltsters of Chicago. The company is a part of the City of Chicago Brewing and Malting Company, the English syndicate.

The J. B. Smith Malting Company has been incorporated at Cleveland, Ohio, with a capital stock of \$100,000. Incorporators: Edwin S. Smith, Louisa A. Smith, Florence U. Smith, Julia Smith, Sherman W. Watterson.

Notwithstanding that the committee which was delegated to look into the subject of brewers' grains and distillery slops as feed for cattle reported against it the Illinois Legislature failed to pass the bill prohibiting it. It was proved by experiments at the state

agricultural stations of New Jersey and New York, as also by many who testified before the committee, that such feed was good and wholesome for cattle.

Barley malt aggregating 9,625 bushels, valued at \$6,207, was imported during the eleven months ending with May, against 4,366 bushels, valued at \$5,013, imported during the corresponding months ending with May preceding.

Born & Co.'s brewery at Columbus, Ohio, suffered a loss of \$1,000 by fire recently. The fire is thought to have been caused by friction from a grinding mill causing a quantity of dust to explode. The fire was confined to the grinding room.

Suit was brought some time ago at St. Paul, Minn., to restrain the Hauser & Son's Malting Company from paying Albert Scheffer, the president, further salary. Decision has been rendered in favor of the defendant and the application denied.

Abbott & Katz's brewery at Brooklyn, N. Y., was recently seized by internal revenue officers, it being alleged that revenue stamps were used on beer kegs more than one time. A bond of \$100,000 will have to be put up before the company can regain possession.

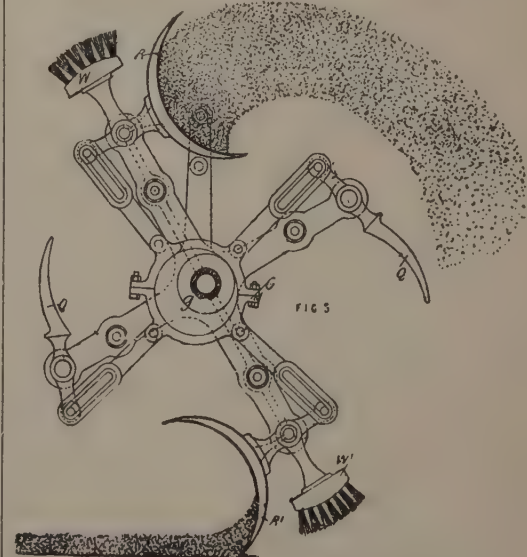
The first car of fall sown barley was received at Chicago July 8. It was from Southern Illinois, and though of good weight, it graded No. 4 on account of being stained. It was not sold and it failed to attract bids. Last year the first new barley came from Minnesota, and was received July 24.

F. Kraus & Co., maltsters of Milwaukee, Wis., recently purchased the barley and malt which was damaged by the recent burning of the Wisconsin Malt and Grain Company's elevators at Appleton. They paid about 10 cents per bushel for the grain, or \$10,000 for 100,000 bushels. Some of the barley is uninjured, but the malt can only be used for feed or making vinegar. Kraus & Co. have every facility for handling it.

It is reported that the new California barley is turning out well both as respects quality and quantity. It is evident that there will be any quantity of export material available this season, and exporters will undoubtedly do their share toward restoring the trade which was so materially reduced last season. Already there is a good demand for new brewing for that purpose and a great deal is being marketed.

APPARATUS FOR AGITATING GRAIN.

The accompanying cut shows an apparatus for agitating or turning over grain in malt kilns, malt floors, granaries, bins, etc., which was recently patented in England by G. F. Redfern of Finsbury, Middlesex.



APPARATUS FOR AGITATING GRAIN.

The mechanism is very simple, consisting of scoops R, brushes W, and rakes Q. These agitating appliances are secured to a hollow shaft G, and their positions are regulated through levers attached to the eccentric strap G.

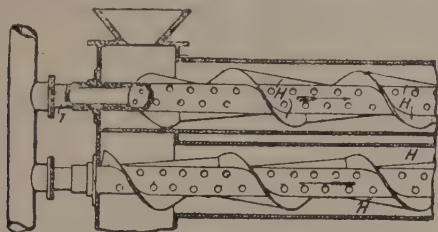
In order to rotate the scoops and brushes at a high velocity while their supporting carriage travels at a low speed, the velocity of the rope from which the power is taken is increased through the medium of

wheel gearing. Air or gas with or without water or other fluid may be supplied to the hollow shaft and transmitted through suitable pipes to the interior of the scoops, from which it escapes through perforated face plates. In addition to the face plates a water sprayer may be attached.

A BRITISH GRAIN DRIER.

The apparatus shown in the accompanying cut, a machine for drying brewers' and distillers' grain, etc., has been patented in England by H. H. Lake of Southampton Buildings, Middlesex. The machine consists of a series of cylinders with perforated shafts and screw conveyors. Each tube or cylinder consists of three parts. Two parts form the upper half of the cylinder and are separated from one another by a longitudinal slot or opening, and bolted to the lower part, which is semicircular. The three parts are fastened together by rings or clamps. Attached to the perforated shafts running through the cylinder are stirrers or paddles, *H*.

To dry the grain or other material hot air is admitted to the perforated shafts by pipes *I*, which pass some distance into the shaft so as to prevent the heating of bearings. The material is thus heated or dried



while being conveyed through the cylinders, the stirrers on the shaft preventing it from accumulating and remaining in a bed at the bottom of the cylinder.

SOUTHERN ILLINOIS GRAIN BUYERS.

The Southern Illinois Grain Buyers' Association held a meeting at Alton, Ill., June 16, for the election of officers and the transaction of other business.

The following gentlemen were elected officers: W. D. Sparks, Alton, president; J. E. Duffield, Jerseyville, vice-president; G. E. Brown, Brighton, secretary; W. B. Pierce, Alton, treasurer. Besides these the following grain men were present: E. and M. Cockrell, C. Coulthart, F. Dodson, J. H. Duffield, Jerseyville; J. F. Bertram, Rockbridge; H. C. Kauffman, Bethalto; A. W. Lloyd, Springfield; Richard Nethercott, Jerseyville; Orrin Palmer, Kemper; James Parrott, Litchfield; Ex-Governor E. O. Stanard, H. O. Grassmuck, St. Louis.

OVERBIDDING FOR WHEAT.

A serious perplexity is agitating the erstwhile peaceful mind of the Michigan miller, writes the Michigan correspondent of the *Northwestern Miller*. There is, apparently, a considerable amount of wheat left in the farmers' bins. It is, of course, of fine quality, and the longer the farmer holds it the finer and handsomer it appears to grow. Like a spanking matched pair of bays, it is for sale only at a fancy figure. In a certain town the wheat buyers are A, B and C. The first is a miller, and B and C are elevator men. They agree with each other in the morning upon the highest price they will pay for wheat during the day, which is based upon the close of the market the previous day and the opening on the morning in question.

Mr. Farmer, who has a good, round lot of wheat, engages in a grain parley with Mr. C, and thereby incidentally discovers the above named price. He intimates that he might sell on a bid a couple of cents higher, and finally buyer C practically commits himself to 1 cent above the established price, rather than lose so good a purchase. But the artful granger prefers not to close the deal, but goes straight to the mill office, asks his best friend what is the top price, receives the honest answer, and boldly asserts that he has just been offered a cent more. If he now fails in obtaining a still better offer, he proceeds to tempt the other elevator man.

This farmer, who has been in position to carry a

crop or two of wheat, has suddenly become "king for a day," and hundreds who have sold their wheat cry "Long live the king!" So, in the midst of what should be a very prosperous year, we are confronted with an unusual condition. The problem before the miller is, "Shall I pay a good deal more for wheat than it is worth?"

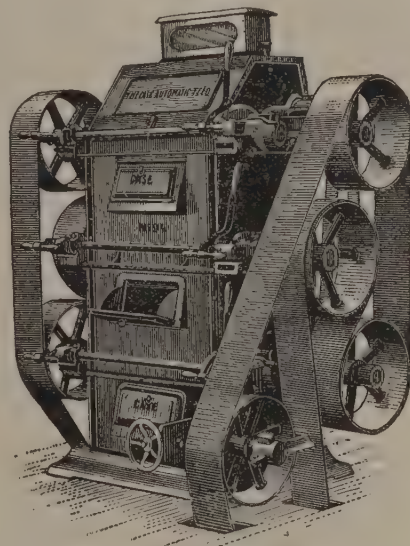
This whole matter is assuming a serious aspect. A good resolution for every wheat buyer to spread on his new page daily is about as follows:

"Resolved, That I stand by a fair-and-square agreement to pay only the highest market price for wheat, made this day and date, and before any higher price is offered let the compact be changed accordingly."

THE CASE THREE-PAIR HIGH CORN AND FEED ROLLER MILL.

During the year 1894 a large number of elevator men embarked in the feed-grinding business in connection with their regular elevator interests. The majority found the business profitable. Owing to the poor hay crop it is expected there will be more ground feed used this year than last. Much of the wheat grown in a number of states, also, will be fit for nothing else than to be ground up into feed. Many elevator men, by investing in a good feed mill, can utilize more of the power at their command, can utilize waste space and keep their help employed more of the time, get more of the farmers' trade and make a good profit.

The accompanying cut represents the Case Co.'s Six-Roller Feed Mill, a compact and very strongly-built mill. It is manufactured in four sizes, and is driven by belts from the line shaft on both fast and slow ends. If it is desired to use but one belt, a machine



CASE THREE-HIGH FEED ROLLER MILL.

is built with cut gears and rawhide pinion to drive the slow rolls. The makers claim this to be one of the most durable and the nearest approach to a noiseless gear that is made. If gears are used, less belting is required, and the 16-inch pulley for the slow side is not needed.

The mill is provided with the Case Co.'s Automatic Feed, which is very near perfect in its operation. The frame is cast in sections and firmly bolted together, with a broad, substantial base. It is so made that any of the rolls can be taken out of the frame by removing the small end plate. The machine is provided with all adjustments, which are strong, simple and positive. The wave corrugation is used, which gives an equal distribution of stock to the lower pairs of rolls. It is claimed this causes the stock to pass through the machine in an even sheet the entire length of each pair of rolls, and as all end pressure is thus avoided, a limited amount of power is required to operate the mill.

In our tabulation of the range of prices at Chicago in this issue is recorded a break of 17 cents in flaxseed on July 2. It is something which very seldom happens in the Chicago market, and was due to A. M. Wright and others, who own most of the flaxseed in store at Chicago, trying to sell.

Queries and Replies.

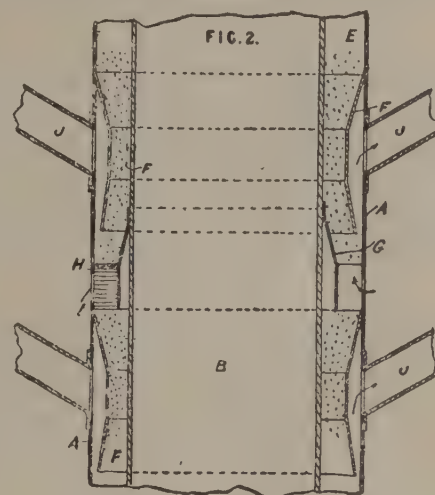
Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.

No. 1. Which is the Better, Sweep or Tread Power?—

We have an elevator with a sweep power (horse). We would like to know if the tread power is better than the sweep. Our carpenter says he can build bins 30 feet high over a 24x24 horse power strong enough to hold 20,000 bushels of oats. Would it be safe to build that way?—SMITH BROS., Eagle Grove, Iowa.

APPARATUS FOR CONDITIONING GRAIN.

An apparatus which employs some new ideas in the drying or conditioning of grain is shown in the accom-



APPARATUS FOR CONDITIONING WHEAT.

panying cut. It has been patented in England by W. N. Whitmore and others of Wickham Market, Suffolk. The apparatus consists of two cylinders. The inner one is divided into two parts, the upper compartment being heated by steam and the lower cooled by means of cool air. The outer cylinder is arranged with deflectors and inlets and outlets for air.

In operation the grain passes down through the annular space *E* between the vertical or inclined cylinder *A*, *B*. The deflectors at *F* and *G* cause the grain to pass in contact with the heated cylinder *B* and deflected away from it at *G* and traversed by currents of cold air admitted by the openings *I* beneath *A*-shaped deflectors or roofs *H*. Through the lower edges of the latter the air escapes, passes through the descending grain and escapes by the openings at *J* to vertical chimneys or shafts fitted with exhausting apparatus.

Changes can be made in this as desired or to suit different purposes. The cylinder *B* might be changed to heating pipes, etc., and the deflectors might be rearranged, those at *G* being dispensed with where the material is cooled.

This is but one of the many machines which the British miller finds necessary in order to clean Indian and Russian wheats. Some of the wheat from these countries is so thoroughly mixed with dung and other dirt that it is almost impossible to get it clean enough for human food.

RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain at Toledo, Ohio, during the 5 weeks ending July 6, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	588,000	712,000	381,000	997,000
Corn, bushels.....	201,000	60,000	365,000	51,000
Oats, bushels.....	14,000	4,000	1,000	8,000
Barley, bushels.....	12,000	1,000	.....	1,000
Rye, bushels.....	6,000	6,000	1,000	11,000
Clover seed, bags.....
Flour, barrels.....	6,300	8,800	83,000	73,100



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HARLEY B. MITCHELL, - - - Editor.
CHARLES S. CLARK, - Assistant Editor.

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., JULY 15, 1895.

SHORTAGES IN SHIPMENTS.

The docking of grain shipments received at central markets for future shrinkage has become such a burden upon the country shipper that he has finally turned and is now striking at the shortage abuse or steal in earnest. A report of one Illinois shipper for the ten months ending May 1 shows shortages on 335 cars amounting to nearly 5,000 bushels, and this report includes no shortage less than four bushels. If this firm's shortages of less amount than this had been included the aggregate shortage would have exceeded 5,000 bushels. The detail report shows that it lost by shortage 2,360.06 bushels of corn, 1,244.51 of wheat, 1,081.08 of oats and 27.08 bushels of rye.

Early in April the Illinois Grain Dealers' Association commenced to investigate this steal, and no sooner was the investigation commenced than did the shortages commence to grow less at two of the principal primary markets. The average amount of the shortages at these markets has fallen off about 65 per cent., which clearly shows that the Association has not labored in vain.

However, the abuse is far from being corrected yet. The elevator men of Chicago have the audacity to claim the right to take 40 to 60 pounds from each car received, and the careless weighmen seem to think another cipher should be added to the right-hand side of this amount. St. Louis elevator men want more, and like others, take what they think the shipper will stand. A thorough investigation of this subject shows that the average shortage in shipments to Toledo and Detroit is much less than to the other markets named. There is no excuse for this and no explanation other than it is due to the greed of the terminal elevator men.

The practice of making the country shipper bear all the future shrinkage of the grain he ships is wrong and should be stopped. Let the owner of the grain bear the shrinkage; issue storage certificates subject to enough shrinkage

to protect the elevator man from loss. The toleration of this abuse serves to encourage the public elevator men to take more than enough to offset future shrinkage, and finally he finds it impossible to restrain or limit his desire to dock receipts.

The Illinois law provides that the carrier shall issue a clean bill of lading and deliver every pound of grain received. The enforcement of this law would prompt the railroads to weigh the grain carefully, to provide better cars and to guard the loaded cars more vigilantly. Dealers of other states can secure the same protection if they will organize and make a vigorous and persistent effort to secure it.

REGULAR AND IRREGULAR HOUSES AT CHICAGO.

A small tempest was precipitated on the Chicago Board of Trade by the report of the Warehouse Committee, which recommended that the applications covering eight elevators be rejected. The warehouses made regular by the vote of the directors in accordance with the recommendation of the Warehouse Committee have a capacity of about 28,000,000 bushels, while those excluded from the list have a capacity of between eight and nine million bushels. The reasons assigned for excluding some of the old houses were that they were not up to date in their equipment, while others were alleged to be simply private storage houses anyhow. It is quite possible that some of the excluded houses may be admitted later on; they are quite certain to be should their capacity be needed.

Complaint is made by some of the owners that unjust discrimination was made against them. Perhaps this is true. It is altogether likely that most of the other houses would have been excluded except for the reason that the Board must have "regular" storage. So long as this was the case, it was deemed best to make examples of some of the houses that could best be spared. This is discrimination; but it was not a bad stroke of business after all to divide the elevator forces. *Divide et impera* is an old motto, and the anti-elevator forces have evidently adopted it as a basis for a new campaign.

THE FEED MILL IN THE ELEVATOR.

Last season many elevator men invested in a feed mill and provided facilities for supplying the demand for ground wheat and other feed. We have not learned of one case in which it did not prove a profitable investment. With hay at double the price it was last winter and the pastures of many sections already dried up, ground feed promises to be in greater demand during the coming season than ever before.

Corn and oats will be cheap unless some unforeseen calamity befalls these cereals, and some of the wheat will be too poor to mill for flour, so there will be ample material for the feed grinder to work upon without grinding up screenings, corncobs, oat hulls and other rubbish for feed. The man who will sell this stuff, which contains very little, if any, nourishment, as feed can not pose as a humanitarian. If he has to compete with unprincipled dealers he should grind up a lot of the stuff and offer it for what it is, at a low price. If feeders desire to use it, let them mix it to suit their purses and consciences. Too much of this stuff has been served to stock as feed. Oatmeal millers and shippers are not blameless. The elevator man can make a good profit by grinding feed without resorting to this trickery. Many elevator men have ample room to spare for a feed-mill, and their power and help is seldom busy all the time, so they can put in and run a feed-mill with little expense other than first cost. The elevator man has a better opportunity to make a success of this business than anyone

else, and by advertising his feed business and pushing it, he should get a good business in a short time, even in a small town.

THE MEETING OF ILLINOIS GRAIN DEALERS.

The annual meeting of the Illinois Grain Dealers' Association at Decatur, a full account of which is published in this number, was a success in every sense of the word, although the attendance was smaller than had been expected. Considerable work was done in the meeting and the reports of the committees and the attorney were gratifying. They showed that work is being done and that the Association is making an aggressive fight for the rights of its members. This fact was fully appreciated by those present, as is shown by the large number who applied and were admitted to membership.

The Association is growing rapidly not only in membership but in influence with the trade and the carriers. It is doing earnest work in the interest of the regular dealers, every one of whom should apply for membership and lend his support. The cost is so small that no dealer can afford to stay out.

THE WAREHOUSE COMMISSION AND THE ELEVATOR CASES.

The annual report of the Illinois Railroad and Warehouse Commission makes no reference to the elevator cases, except by the publication of the letter of John Hill Jr. to the Chairman and the reply thereto. It will be remembered that in the hearing before the Commission, cases were made out against nine owners of public warehouses. Against three of the largest owners no cases were made out, because before the termination of the hearing the jurisdiction of the Commission was attacked and the claim made that proceedings to revoke the licenses of public warehousemen should be entered in the Circuit Court.

The Commission, it seems, was unwilling to decide the cases of nine, while the three remaining cases were pending.

It may be inferred from this that the Commission would have decided against the elevators. This is not exactly comforting to the dealers who feel that they are wronged by the present methods of conducting the public elevators. There is no essential difference between the position of a public warehouseman and any other trustee, and they ought not, in justice, be allowed to buy and sell property which they are supposed to hold in trust, nor to profit by the position of trustee. The Commission ought to rule on the matter regardless of the three cases which are not before it.

RECOMPENSE FOR COUNTRY ELEVATOR MEN.

The charter of every railroad requires it to provide facilities for receiving, handling and shipping all kinds of merchandise, and all carriers provide facilities for handling everything except grain. This part of their work they force upon the elevator men and require him to pay rent for the ground upon which he builds the house to handle this class of freight.

Many elevator men have not yet awakened to the fact that they are acting as local freight agent for the carrier, but at their own expense. The elevator men not only go about the country to procure freight, but provide a freight house for receiving and loading it into cars. Some country shippers, and especially those of Central Illinois, have come to the just conclusion that the carriers should either provide facilities for handling their grain in bulk or else pay them for receiving and loading this class of freight.

The carriers are not disposed to consider favorably the proposition that they provide

facilities for receiving and shipping grain, but pretend to be seeking some way by which they can legally pay the elevator man for this service. One practical way suggested is that the carrier appoint the elevator man its agent and authorize him to receive grain for shipment in bulk over its line. He would then receive into his elevator all grain offered for shipment and store same free for three to five days. If the owner desired to sell and the elevator man desired to buy the grain so received, all well and good; this would not interfere with his work as the authorized agent of the carrier. But for this service the carrier would pay him a commission of one or two cents a hundred for business secured, as shown by the amount of grain shipped. If the owner of the grain did not desire to sell or ship, he could secure storage room for a reasonable charge as long as he desired it. The elevator man being the authorized agent of the carrier for receiving grain for shipment in bulk, other shippers could not kick for cars to load direct or kick for bulk grain handling facilities provided for by the carrier's charter.

Such an arrangement would be reasonable and fair to all parties concerned.

AN ELEVATOR MUTUAL FIRE INSURANCE COMPANY.

A few grain dealers of Southern Minnesota and Wisconsin have organized The Grain Dealers' Indemnity, and August 1 will commence to insure their elevators against loss by fire. The company was organized on the Lloyds plan by six prominent elevator companies. They will insure only the elevators of members, and as the company's maximum line on any one house will be \$5,000, the members can place only a portion of their business with the company. No insurance will be issued to outsiders, as the manager will be kept busy looking after the risks of the organizers. Each elevator will be inspected frequently by an insurance expert. The officers are: E. D. Dyar, chairman of the Advisory Committee; H. G. Smith, an experienced insurance man, secretary, and W. H. Garlock, treasurer. The chairman and treasurer, together with S. Y. Hyde, O. L. Marfield and A. G. Moritz, compose the Advisory Committee.

That the company will be a success is a foregone conclusion. All of the members have a number of risks upon which they have been paying an exorbitant rate for insurance. Other elevator men can also reduce the cost of their insurance by organizing mutual fire insurance companies. The millers have a dozen mutual fire insurance companies, each one of which on the average saves every member one-half of what the same insurance would cost him in a responsible stock company. The elevator men could support as many, and there is no reason why they should not.

PUBLIC WEIGHMEN IN PUBLIC ELEVATORS.

Many persons connected with the grain trade have confidently supposed that public weighmen were placed in all public elevators and that grain shipped to central markets would be weighed and reported correctly by a public weighman, but they have been laboring in error. In Minnesota all grain received in elevators at central markets is weighed by public weighmen, elsewhere it is otherwise.

The Chicago Board of Trade has a public weighmaster and the work of his weighmen had never been questioned until recently they have been charged with deducting 40 pounds from each car. Several years ago the weighmaster said they were taking down weight and recorded no amount less than 10 pounds. In reply to a recent inquiry as to why public weighmen were not kept in all of the public elevators, the public weighmaster wrote: "We do not keep weighmen in all public elevators, because

many of the receivers here will not pay for weighing there. One time I had men in nearly all the regular elevators, but for lack of proper support was compelled to take them out."

In justice to country shippers, and as a safeguard for those who ship to the Chicago market, public weighmen should be placed in all public elevators, and instructed to report the full amount of grain received. The same applies to other central markets, and especially East St. Louis and Buffalo.

COMMISSION MEN WHO UNDERMINE COUNTRY DEALERS.

A few grain commission men at some central markets seem to be disposed to ignore the country dealers and buy direct from farmers through an agent, or solicit consignments direct from farmers. Of course, no one can raise objection to such methods if the commission man is disposed to confine his business to dealing this way. But, if he desires to secure any business from the regular country dealers, he must stop trying to undermine their business.

It does not matter that he is not buying from farmers in the district occupied by the regular dealers who consign to him. If he is doing any business of this kind he does not merit the regular dealer's patronage, and if the regular dealer is awake to his own interests he will see that he gets none of it. The country shipper knows that the commission man who ignores the regular dealer of any district will ignore him just as soon as he can afford to do so.

Country dealers have learned that they must stand together in this matter and require the city commission man to stick to his branch of the business or give up handling their shipments. This requirement is not unreasonable, neither does it work injustice to anyone. The farmer never gets more for his grain than is paid by the regular established country buyer, who is dependent upon his patronage for a living. Reports to the contrary may prove tempting bait to the gullible farmers for a time, but they can not be deceived for any great length of time by any man who busies himself with trying to advertise that he is honest, that he is fair. In time the farmers will commence to ask what is the need of his advertising that he is honest, and eventually to doubt that his statements are true. The commission man must deal exclusively with the regular country shipper or not at all.

CROP REPORTING SCHEMES.

It is to be hoped that all of the plans for improving the crop reporting service that are said to be in contemplation by the authorities in Washington, will not be put into operation. The government, it is said, is collecting a list of threshers. The idea is that in return for a government license the thresher is to be induced to make reports to the government. It is true that Secretary Morton's views of the powers of the general government would require the co-operation of each state. The system would be cumbersome, to say the least, and to lean upon it would be folly. The reports of threshers would be valuable, it is true; but they ought to form but a small part of a crop reporting system.

Another suggestion, truly idiotic in its conception, is to have political candidates make crop reports from information gathered during the progress of their canvass. To whom is due the credit for this brilliant conception, rumor saith not. Whoever he may be, he evidently needs brain food; or possibly a trepanning operation would be better. The suggestion is beneath or above contempt.

Another suggestion which the despatches say is "in embryo" is to use the machinery of the collectors of the income tax, "should the law ever be enforced." Of course the law has been declared

unconstitutional, but possibly the Supreme Court will reverse its decision when it learns that the machinery is needed to collect crop statistics. The brilliant genius who made this suggestion never read the law or his suggestion would have suffered premature eclipse. In no way could the machinery of the Collector of Internal Revenue have been turned to effectual use.

Progress has been made in the new reporting service, nevertheless. The country has been divided into 21 districts, seven of which are single states and fourteen consist of groups of states. There will be a reporter for each township, which will give the government the services of 50,000 observers. Secretary Morton wants an annual acreage census instead of basing comparisons on the last census, as a means of improving the service, and Congress ought to make the appropriation.

The National Iron and Steel Roofers' Association met at Cleveland on July 10. We think from the tenor of the meeting that we are safe in advising our readers who need corrugated iron or steel goods to order without unnecessary delay. It appears to be a settled fact that the prices of such goods must advance materially in sympathy with the trend of prices in the iron and steel markets.

ACCORDING to the report of the Bureau of Statistics breadstuffs to the value of \$8,954,040 were exported in June, against a valuation of \$7,966,820 in June, 1894; and in the twelve months ending with June exports were valued at \$110,098,643, against \$161,677,730 during the same period of 1893-94. The exports of grain in June, compared with those of the same month of the preceding year, were: Wheat 4,533,945, against 3,450,012 bushels; corn 2,974,528, against 2,732,244 bushels; oats 36,592, against 41,603 bushels; barley 106,265, against 7,124; no rye, against 178 bushels in June, 1894; and the exports in the twelve months ending June, compared with same time in 1894, were: Wheat 75,831,639, against 87,958,280 bushels; corn 25,507,753, against 63,425,655 bushels; oats 540,975, against 5,671,352 bushels; barley 1,556,715, against 4,740,586 bushels; rye 8,879, against 230,836 bushels. In the twelve months ending June 14,942,647, against 16,536,991 barrels of wheat flour were exported, 20,484,688, against 9,712,406 pounds of oatmeal, and 217,192, against 289,115 barrels of cornmeal exported in the same time in 1894.

SOME of the bright lights have been figuring on the effect which trolley cars and bicycles have had on the oats market. It is claimed that trolleys have supplanted 80,000 horses since 1892, and therefore destroyed a market for about 14,000,000 bushels of oats. This seems a rather summary way of figuring, for many of the electric lines did not supplant horse car lines at all, but occupied territory previously without street transportation. The effect of the "bike" is difficult to determine. Both for pleasure and professional purposes the bicycle has supplanted the horse to a very great extent. Liverymen in cities declare it has practically ruined their business. But are there fewer horses? That is the real question; not whether horses are less used for certain purposes than formerly. One thing is certain, if horses remain as cheap as they are now (and you can get one almost for the asking, in some localities) their numbers will decrease right speedily, for there will be no incentive to raise them. So, whether the trolley and the "bike," and we might add the gasoline engine, have affected the consumption of oats and corn, the decrease in the number of horses that seems sure to occur in the future will cut off one item of consumption to an appreciable extent. But we would not advise farmers to burn their corn for fuel just yet.

EDITORIAL MENTION

SEND us the grain news of your district.

GRAIN dealers should organize a National Association.

EVERY central market should have public weighmen at public elevators. It is a protection justly due the country shippers.

NOW is the accepted time to clean out your elevator thoroughly, and give it a coat of strong whitewash. Grain-infesting bugs delight in dark, dirty places.

BARRELS of salt water with two buckets to each barrel placed in different parts of your elevator, will reduce the fire risk and the insurance rate at the same time.

A STRONG wire screen placed over your windows will keep out sparks from the passing locomotives, keep out the sparrows, pigeons and rocks thrown by the boys.

THE Haskins Iron Works have issued a compact little circular devoted to the Haskins Gasoline Engine, a copy of which they will be glad to place in the hands of all interested parties.

THE wheat visible last year at this date was 53,000,000 bushels, and two years ago 59,000,000, while now it is 41,000,000. This is a very appreciable decrease, but even the last figure would have been thought very large a few years ago.

PEOPLE in the East and in Europe are just beginning to realize that the Chicago Canal is one of the engineering feats of the century. The methods and machinery of canal digging have been revolutionized. The digging of an ordinary canal ought to be a comparatively simple thing in the future.

UNFORTUNATELY much of the seed wheat planted by the farmers of South Dakota was not wheat, but seeds of foul weeds. Some of the farmers are now raising a kick because they have a good crop of mustard. They should have bought cleaned seed of the local elevator man or had him clean the seed for them.

A VERY complete catalogue is the "No. 6," just issued by the Kansas City Metal Roofing and Corrugating Company, and devoted to its manufactures of corrugated iron, metal shingles, wire and iron lath, building paper, etc. The use of iron and steel for building purposes has become so general that this catalogue will interest almost every owner of a building of almost any character. It will be sent on application.

ANOTHER kick is made that there is a genuine leak in the government crop report, and this time the kick comes from New York. It is said the tip there was that the condition of winter wheat would be 65 and of spring wheat 101. The actual figures were 65.8 and 102.2. This is certainly pretty close, as the guesses were about 99 for spring wheat and 72 for winter. In fact, these figures were the "tip" at Chicago and proved to be way off. If there is a leak, New York seems to have a cinch on it. The Chicago

end of the leak seems to be stopped up pretty thoroughly.

JOYOUS news! The carriers are repairing bad order cars and buying new grain cars, preparatory to handling large quantities of grain this fall. But alas, this joy is made gloomy by a vision of a rush of grain to market, delays in transit and a car famine.

WITTE IRON WORKS COMPANY of Kansas City, Mo., has issued a very neat little catalogue of its Improved Witte Gas Engine. It makes a readable addition to the literature of the gas engine, besides stating the case for the Witte in strong terms. This catalogue marks the twenty-fifth anniversary of this firm.

FRANCE, it is claimed, will have 42,000,000 bushels less wheat than last year. Belgium and Holland broke the record on wheat imports in May, having received 13,560,000 bushels in that month. Cables from Buenos Ayres say that wheat exports are too small to fill contracts. This is the gist of the latest foreign news.

MAKE it a point to inspect your cars and see that they are well coopered. The carrier is duty bound to provide good, sound cars for the shipment of merchandise, and is liable for damages resulting from having done otherwise. However, by using a little precaution you can save some grain and considerable trouble should you attempt to collect for the grain lost.

SHIPPERS should place a card bearing the weight of the grain loaded into the car, number and initial of car, on each side door of every car of grain shipped. Then when it arrives at destination the weighman will discover any shortage and investigate the matter before the grain has been spouted to a bin and its identity lost. The car may have been leaking or have been broken open before arriving at destination.

RECEIVERS could make their markets more attractive to country shippers by securing the establishment of public weighmen in all public elevators. The shortages in some markets are notably larger than in others, yet there is no excuse for it. For instance, the shortages in shipments to Detroit are so small that we have never received one complaint against that market on account of shipments falling short of shippers' weights.

THE *Chronicle* Fire Tables, just issued, show that in the past year 118 grain elevators burned, making a total of 1,247 in the past 20 years. Under the head of grain warehouses, we find 29 burned the past year, with a total of 589 for the past 20 years. Of flour, grist and oatmeal mills, 291 burned in 1894, with a total of 4,735 for the 20 years. Breweries burned to the number of 45, with 840 in 20 years; malt houses, 20, with 163 for the total period. It seems that more ice houses burn than elevators, for in 1894 142 succumbed to fire, with a grand total of 1,995 for 20 years. However, ice houses are not regarded as choice risks.

THERE is wheat in some of the Chicago elevators that is four years old. That does not mean necessarily that it is bad wheat, for grain will maintain its quality with proper care for a longer time than that. Just the same, some of the old wheat is not a first-class article and is occasioning complaint. Millers have refused to take some of it. A public elevator in Illinois that contains wheat four years old needs investigating. The law prescribes that the grain shall be shipped out in the order received. This law is ignored because it would require public

officials at each house. The letter of it would not be difficult to observe, and fair dealing demands that the spirit at least should be.

IF the reader will cast his eye over the list of "regular" Chicago elevators published elsewhere, he will not discover that of the National, over whose destinies Murry Nelson presides. In fact, Mr. Nelson did not apply to have his house made regular, though he kicked vigorously a few months since over the attempt to declare it irregular. It makes considerable difference sometimes whether an action is voluntary or involuntary.

ALTHOUGH the complete crop reports of the weaklee no-it-awl and the daylie markit makir are not sprung upon the unsuspecting public by the news bureaus with the frequency of the spring season, yet a new one comes out now and then and the bulls or the bears work the market with it if it supports their views. The speculators have shown such remarkable greed for reports of this kind that many publications of no standing and no facilities for gathering crop reports have utilized this demand for anything marked crop report, to advertise their sheets. The speculators have grabbed the worthless just as readily as the good reports.

"FIREPROOF" grain cleaning machinery is now extensively advertised in Germany. The "fireproofing" consists in constructing them almost wholly of iron. The point of danger in cleaning machinery is in the fan, which is likely to carry fire originating in the journals to combustible matter. This point must be guarded against even in a machine constructed entirely of metal, by having the journals outside in plain sight. One of the best methods of fireproofing any machine is to look after it. That is better than any method we know of, without seeking to disparage efforts made in the direction of greater safety by improved construction.

A KANSAS CITY grain man writes to the *Kansas Farmer* that he does not believe any deterioration has taken place in the character of the hard wheat of the Southwest, as some have claimed, and therefore he does not think it necessary to secure seed from Russia or anywhere else. While believing in selection of seed from fields of strong growth and good yield, he nevertheless believes the hardness of the wheat is due either to the soil or climate. Of course, he may be largely in the right, but in the Northwest there are sections where hard wheat has run out through progressive deterioration, showing that soil and climate are not the only factors. A choice type of grain can be preserved only by exercising care in the selection of seed. A tendency to degenerate seems to characterize wheat varieties.

ONE of the neatest bits of trade literature we have seen in a long time is a "History of Grain and the Grain Trade of the World," issued by H. M. Greene & Co., Rialto Building, Chicago. It is a brochure of 44 18-mo. pages, printed in colors on heavy paper, with an artistic cover. The author has collected from many sources all that is now known of the grain trade from prehistoric times, down through the ages of the Egyptians, Assyrians, Greeks and Romans, through the middle ages and among barbarous peoples, to the present day. It concludes with a brief account of the grain trade of to-day, with notices of the principal grain producing and grain importing nations and grain centers. This little book evidently represents a vast amount of research, and its author is a master of the art of condensation into readable form. It was printed for private and free circulation by Messrs. H. M. Greene & Co., but deserves a wider publicity.

EXPERIENCE WITH AMERICAN ELEVATORS IN RUSSIA.

BY ALFRED F. BENDER, ENGINEER, ST. PETERSBURG.

It may be of interest to make out the possible cost of a system of state elevators, if such were to be established notwithstanding all the disadvantages indicated in the economical life of the country, and if such were intended not for export grain only, but also for the greater portion of crops grown for domestic use. In the United States large elevators are built at a cost of 6 to 10 cents per bushel of their capacity. The average cost of a large Russian elevator is about \$3 for every 6 bushels or 50 cents per bushel. The most expensive Russian elevator, that at St. Petersburg, cost 46.6 cents per bushel, that at Odessa 52.8 cents per bushel, at Nicholayeff about 50 cents per bushel, at Yeletz only about 28 cents per bushel. The two larger elevators of the Riasan-Uralsk Railroad Company at Kozloff and Rjashsk cost about 28 cents, while the two smaller ones, at Dankoff and Lebedian, cost 30 cents per bushel.

According to the official returns of the Department of Agriculture and Rural Industry the total annual amount of crops raised varied during five years, 1886 to 1891, between 189,062,000 and 261,274,000 tshetverts, excluding seed grain, and in consequence the exports varied from 37,028,000 to 59,081,000 tshetverts, or 222,168,000 to 354,486,000 bushels, besides that which was held over from previous years, which made a stock varying from 1,944,000 to 46,985,000 tshetverts. The latter figures relate to the year of most abundant or maximum crops. To handle these crops provision would have to be made to store and convey at least 1,404,000 bushels at a time. A system of 10,401 railway elevators of 7,500 tshetverts capacity each would be necessary, presuming they would be in operation some months of the year only, and every tshetvert of grain would have to be kept for 30 days. The cost of such a system would be \$68,250,000. But beside the railway elevators a system of inland or central elevators would be needed for the same amount of grain. Rating their average capacity at 70,000 tshetverts we find that no less than 665 houses would be required, their total cost amounting to \$105,000,000. Moreover, there would have to be no less than 27 elevators with an average storage capacity of 150,000 tshetverts at ports to be able to handle about 59,081,000 tshetverts of export grain, keeping every tshetvert 30 days. This system would have to consist of 81 houses, instead of 27, and would cost \$36,450,000.

Summing up the whole system we find that there would be 11,147 elevators which would cost at least \$209,700,000. Adding to this 5 per cent. per annum for interest and $\frac{1}{10}$ of the amount invested for wear and tear and the expense of sustaining the whole system in operation, we arrive at an enormous figure as capital the government would need if it started in the elevator business on these lines. The expenses of running the elevators may be reckoned at 5 to 10 per cent.—say, on the average 6 per cent. per year on the capital invested—and would amount to \$23,309,500 per year. With 5 per cent. interest and 2.5 per cent. depreciation ($\frac{1}{40}$ of the capital invested) it would make $13\frac{1}{4}$ per cent. of the investment—\$28,309,500 of unavoidable yearly expense to be covered out of the income of 11,147 state elevators. But there is as yet hardly any prospect of such a system being established, as the government does not seem to be enthusiastic in regard to it, and is to-day much less in favor of elevators generally than it was a couple of years ago, when during the famine a special committee of the Department of Public Works had begun the construction of a certain number of state elevators and grain storage warehouses. These houses were not completed and were partly forgotten as soon as the famine was over and the committee dissolved.

The trouble and annoyance which may sometimes be caused to the government by its possession of a useless elevator will be understood from the following example: One of the elevators which was completed by the Committee of Public Works became the property, and most likely an unprofitable one, of a municipal or semi-private railway which had become the property of the state in accordance with the policy of the government. The government decided to offer the elevator for rent, but nobody wanted to lease it for any

purpose and it lies idle, in which condition it will be likely to remain, it is said, for God knows what length of time to come. Fortunately, such houses are not numerous and their number is not likely to increase rapidly, at least so long as there are no other schemes in view to counterbalance such burdens.

There are still the results of the railway policy to be learned. Upon the growth and development of distributing facilities depends the solution of the elevator question in Russia. Roads and highways go first; then follow railways and good navigable water ways, both natural and artificial, and then, ultimately, the development of agriculture and rural industry, with cheap credit, protective tariff system, merchant marine, elevators and other necessary improvements to facilitate outlet but by no means inlet.

Trade Notes.

There's nothing in this fleeting world,
Of which a man can think,
That is going to bring him business
Like the use of printer's ink.

If a man can do business he should let it be known.
—Benjamin Franklin.

The little seed Advertising, planted in the right way, at the right time and in the right soil, is sure to bring an abundant harvest.

The proprietors of the San Joaquin Ranch in Orange County, California, have recently purchased a new smutter with which they will clean their own barley.

The Compound Fodder Company of Toronto, Ont., has been incorporated with a capital stock of \$50,000 to manufacture machinery for manufacturing fodder, etc.

A cargo of over 2,000,000 grain bags and a large amount of bagging material arrived recently at Portland, Ore., from Calcutta, India. The cargo was consigned to Balfour, Guthrie & Co.

The business man who refuses to advertise because he once inserted an ad. and received no immediate or perceptible benefit, is fully as logical as the Indian who declined a pillow for the reason that once, by way of experiment, he slept on a feather and found it uncomfortable.

A very neat catalogue has been issued by the Keystone Iron Works of Fort Madison, Iowa, illustrating the Walls Gasoline Engine. The catalogue, besides a full description of the engine, contains a large number of testimonial letters from users of the engine who praise it very highly. The catalogue will be mailed free on application.

Wm. B. Scaife & Sons, of Pittsburg, Pa., report a large increase in trade for both corrugated iron roofing and siding and the orders for their Caldwell Conveyors for handling flour, grain, etc., are coming in from all parts of the country. They have lately furnished a large amount of their corrugated iron for several new elevators now under construction.

Geo. M. Filstead of Erie, Pa., is getting out a car dump, and when he gets a house built to suit him he calculates that with the help of seven men on the track floor, with four stands of his elevators and two dumps, that he will be able to unload 350 to 400 cars per day. Mr. Filstead is organizing a company to develop his patents and for constructing elevators on this new principle.

The Edward P. Allis Company at Milwaukee, Wis., recently made an advance of 10 per cent. in the wages of all its employees. In order to properly celebrate the event, on June 28 the employees of the company decorated the buildings and offices with flags and bunting and by addresses and in other ways testified to the officers of the company their gratitude and appreciation of the interest taken in their welfare.

The Jeffrey Manufacturing Company of Columbus, Ohio, reports that during the entire year its plant has been run with a full force of men, and for a number of months the capacity of the works has been increased by a large night force. The present outlook is good and the company sees no reason for any dropping off

of orders. The new specialties in the conveying line are receiving recognition everywhere, while the coal mining machinery continues to grow in favor.

The Stevens Mill and Elevator Machinery Company of Peoria, Ill., invite all who contemplate purchasing grain cleaning machinery to send for its latest catalogue. The company's principal grain cleaning machines are fully described and illustrated in this book, which is very tastily gotten up and contains much interesting information in regard to grain cleaning machinery.

CHAFF.

Never since the world was born
Was there a crop so nice as corn.
Its tassels are as fine as silk;
Its green stalks keep the cows in milk;
Its kernels' distillations vie
In fragrance with the best of rye;
And, when its other joys are ripe,
The cob is made into a pipe.
In thinking all these virtues o'er,
I'm glad Columbus sought this shore.

It was claimed that the wheat was largely cheat last year. The "cheat" possibly was in going behind the returns.

According to crop reports from some quarters it would appear that the chinch bugs are dying of starvation. Nothing left to eat.

The first wheat of the new crop was received at Stockton, Cal., by the Farmers' Union Milling Company on June 10. It is three weeks earlier than usual.

Now that elevators are to be built of steel instead of wood, will it be in order to look for more or for less "steeling" of grain in storage? Don't answer hastily. Take time to think it over.—*Milling World*.

As an operator in wheat and an expert in running a corner the Hessian fly seems to be quite as skilled as any professional Board of Trade manipulator. He is always a bull, too, though he does get left sometimes.

C. D. Hughes of the commission firm of Comstock & Hughes, Chicago, was arrested recently on the charge of selling a worthless patent to J. F. Hallwegen. Mr. Hallwegen also alleges Hughes has been conducting a bucket shop business in the Rialto building under the names of Perkins & Co., Coates & Co., and Hemingway & Bird.

When the dissolution of an old firm of partners occurs, and a new firm, taking its place, agrees to assume the liabilities of the old, but slight circumstances are required to justify finding an intention on part of a creditor of the old firm, who has notice of such dissolution and assumption of liability, to accept the liability of the new firm instead of the old.

The law has been, in Illinois, that all notes, drafts, checks or other evidence of indebtedness, falling due on either of the days declared by statute to be legal holidays, should be deemed as due or maturing on the day previous, and when two or more of these days came together, or immediately succeeding each other, then such instruments, paper or indebtedness should be deemed as due or having matured on the day previous to the first of such days. Hereafter, according to an amendment made of the Illinois statute, such instruments, paper or indebtedness falling due or maturing on either of the holidays prescribed shall be deemed as due or maturing on the day following, and when two or more of these days, as a holiday and a Sunday, come together, or immediately succeeding each other, then such instruments, paper or indebtedness shall be deemed as due or maturing on the day following the last of such days. This change has been made in consequence of the abolition, taking effect July 1, 1895, of the allowance of days of grace.

Special Notices.

LAND FOR AN ELEVATOR.

Wanted—To rent or exchange, western land for an elevator. Address

J. HILL, Primghar, Iowa.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since June 15 has been as follows:

June.	NO. 2 RED W. WHT.		NO. 2 SPG. WHEAT.		NO. 2 CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 3 BARLEY.		NO. 1 FLAXSEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15	76	77 3/4	49	49 3/4	29 1/2	30	51	51	150 1/2	150 1/2				
16	72 1/2	73 3/4	48 1/2	49	28 3/4	29 1/2	50	51	150 1/2	151				
17	72 1/2	73 3/4	48 1/2	49	28 3/4	29 1/2	50	51	150 1/2	151				
18	72 1/2	73 3/4	48 1/2	49	28 3/4	29 1/2	50	51	150 1/2	151				
19	72 1/2	73 3/4	48 1/2	49	28 3/4	29 1/2	50	51	150 1/2	151				
20	72 1/2	73 3/4	48 1/2	49	28 3/4	29 1/2	50	51	150 1/2	151				
21	69 1/2	70	48 1/2	49	28 3/4	29 1/2	50	51	150 1/2	151				
22	69 1/2	70	48 1/2	49	28 3/4	29 1/2	50	51	150 1/2	151				
23	71 1/2	72 1/2	47 1/2	48 1/2	27 1/2	28 1/2	49 1/2	50 1/2	149 1/2	150 1/2				
24	71 1/2	72 1/2	47 1/2	48 1/2	27 1/2	28 1/2	49 1/2	50 1/2	149 1/2	150 1/2				
25	71 1/2	72 1/2	47 1/2	48 1/2	27 1/2	28 1/2	49 1/2	50 1/2	149 1/2	150 1/2				
26	71 1/2	72 1/2	47 1/2	48 1/2	27 1/2	28 1/2	49 1/2	50 1/2	149 1/2	150 1/2				
27	70 1/2	71 1/2	47 1/2	48 1/2	27 1/2	28 1/2	49 1/2	50 1/2	149 1/2	150 1/2				
28	70 1/2	71 1/2	47 1/2	48 1/2	27 1/2	28 1/2	49 1/2	50 1/2	149 1/2	150 1/2				
29	70 1/2	71 1/2	47 1/2	48 1/2	27 1/2	28 1/2	49 1/2	50 1/2	149 1/2	150 1/2				
30	70 1/2	71 1/2	47 1/2	48 1/2	27 1/2	28 1/2	49 1/2	50 1/2	149 1/2	150 1/2				
1	70 1/2	71 1/2	47 1/2	48 1/2	27 1/2	28 1/2	49 1/2	50 1/2	149 1/2	150 1/2				
2	69 1/2	70	46 1/2	47 1/2	26 1/2	27 1/2	48 1/2	49 1/2	148 1/2	149 1/2				
3	69 1/2	70	46 1/2	47 1/2	26 1/2	27 1/2	48 1/2	49 1/2	148 1/2	149 1/2				
4	69 1/2	70	46 1/2	47 1/2	26 1/2	27 1/2	48 1/2	49 1/2	148 1/2	149 1/2				
5	69 1/2	70	46 1/2	47 1/2	26 1/2	27 1/2	48 1/2	49 1/2	148 1/2	149 1/2				
6	69 1/2	70	46 1/2	47 1/2	26 1/2	27 1/2	48 1/2	49 1/2	148 1/2	149 1/2				
7	69 1/2	70	46 1/2	47 1/2	26 1/2	27 1/2	48 1/2	49 1/2	148 1/2	149 1/2				
8	69 1/2	70	46 1/2	47 1/2	26 1/2	27 1/2	48 1/2	49 1/2	148 1/2	149 1/2				
9	69 1/2	70	46 1/2	47 1/2	26 1/2	27 1/2	48 1/2	49 1/2	148 1/2	149 1/2				
10	64 1/2	65 1/2	42 1/2	43 1/2	24 1/2	25 1/2	40 1/2	41 1/2	135 1/2	136 1/2				
11	64 1/2	65 1/2	42 1/2	43 1/2	24 1/2	25 1/2	40 1/2	41 1/2	135 1/2	136 1/2				
12	64 1/2	65 1/2	42 1/2	43 1/2	24 1/2	25 1/2	40 1/2	41 1/2	135 1/2	136 1/2				
13	64 1/2	65 1/2	42 1/2	43 1/2	24 1/2	25 1/2	40 1/2	41 1/2	135 1/2	136 1/2				
14	64 1/2	65 1/2	42 1/2	43 1/2	24 1/2	25 1/2	40 1/2	41 1/2	135 1/2	136 1/2				
15	64 1/2	65 1/2	42 1/2	43 1/2	24 1/2	25 1/2	40 1/2	41 1/2	135 1/2	136 1/2				

*Holiday. †On Track. ‡Free on board or switched.

For the week ending June 15 Prime Contract Timothy sold at \$5.25@5.50 per cental; Prime Contract Clover Seed at \$9.50; Hungarian at \$1.35@1.75; German millet at \$2.00@2.50; buckwheat at \$1.10@1.25 per 100 pounds. Receipts of hay for the week were 2,908 tons, against 3,773 tons the previous week. Shipments for the week were 241 tons, against 263 tons for the previous week. The arrivals were small and a fair demand existed, although buyers were slow to follow the advance, merely supplying necessary wants. A car of new Kansas Upland Prairie was received June 12. It was of choice quality and sold at \$12.00 per ton on track. Prices for timothy hay show an advance of \$2.00@3.00 per ton and Upland Prairie \$0.50@1.00 per ton, as compared with the previous week. Sales of choice timothy ranged at \$11.00@14.00; No. 1, \$10.50@13.00; No. 2, \$10.00@10.50; mixed, \$10.00; not graded, \$10.00@12.00; Illinois Upland Prairie, \$9.00; Indiana, \$8.00@10.00; Kansas, \$10.00@12.00 for old, and \$12.00 for new; Wisconsin, \$9.00; Iowa, \$8.00@11.50 for poor to fancy. Rye straw sold at \$6.00@7.00.

For the week ending June 22 Prime Contract Timothy sold at \$5.50 per cental; Prime Contract Clover Seed at \$9.50; Hungarian at \$1.40@2.40; German millet at \$2.00@3.50; buckwheat at \$1.10@1.25 per 100 pounds. The receipts of hay for the week were 3,988 tons; shipments, 252 tons. A good local and shipping demand existed for timothy hay during the early part of the week. The receipts were small and a very firm feeling prevailed. Prices advanced about \$1.00 per ton. Toward the close the inquiry was not so brisk, the advance in prices checking the demand, but values were fairly well maintained. Upland Prairie was in liberal supply and the demand was fair, dealers taking hold a little more freely on account of the high prices ruling for timothy hay. Sales of choice timothy ranged at \$13.00@15.00, with very fancy at \$16.00; No. 1, \$12.00@14.50; No. 2, \$12.00@12.25; not graded, \$9.50@14.00; threshed, \$8.00; Illinois Upland Prairie, \$9.50; Indiana, \$9.00@9.50 for old and \$10.00 for new; Kansas, \$10.10@12.00 for good to fancy; Wisconsin, \$9.00@9.50; Iowa, \$9.00@11.50 for fair to fancy; packing hay, \$6.50; straw was very dull and difficult to dispose of. Wheat straw sold at \$4.00 and rye straw at \$5.75@6.50.

For the week ending June 29 Prime Contract Timothy sold at \$5.50@5.75 per cental; Prime Contract Clover Seed at \$9.50; Hungarian at \$2.25@3.00; German millet at \$3.00@3.50; buckwheat at \$1.10@1.35 per 100 pounds. Receipts of hay for the week were 3,976 tons; shipments, 936 tons. The demand for timothy hay was not so brisk as during the previous week. Shippers were not taking hold so freely, and local dealers are giving prairie hay the preference at the difference in price. As the offerings were only moderate, prices were fairly well maintained, though the feeling was easier. The demand for old Upland Prairie was quite good and the market ruled firm. Arrivals fair, and all consignments met with ready sale. Receipts of new hay increasing and sales a little slow, dealers preferring the old hay. Sales of choice timothy ranged at \$14.00@15.50; No. 1, \$13.50@14.50; No. 2, \$13.00@13.50; mixed, \$10.00@11.50; not graded, \$12.00@13.75; threshed, \$11.00; Illinois Upland Prairie, \$8.50 for old and \$8.00@9.50 for new; Indiana, \$8.50@10.00 for both old and new; Kansas, \$11.00@11.50 for new, and \$11.50@12.00 for old; Iowa, \$8.50@12.00 for fair to fancy. Wheat straw sold at \$4.00 and rye straw at \$5.50@6.25.

For the week ending July 6 Prime Contract Timothy sold at \$5.75@6.00 per cental; Prime Contract Clover Seed at \$9.50; Hungarian at \$2.00@

2.75; German millet at \$2.00@3.50; buckwheat at \$1.20@1.35 per 100 pounds. The receipts of hay for the week were 3,623 tons; shipments for the week were 892 tons. Only a moderate business was transacted in this market during the past week. Arrivals of Upland Prairie were liberal and the demand was about fair. Dealers were merely supplying necessary wants and held off for lower prices. No change to note in values. Sales of choice timothy ranged at \$14.00@15.00; No. 1, \$13.50@14.50; No. 2, \$12.00@13.00; mixed, \$11.00; not graded, \$11.25@14.00; Illinois Upland Prairie, old, \$8.50@9.50; new, \$6.00 for heating and \$9.00@10.00 for choice; Indiana, old, \$6.00@9.50; new, \$6.50@10.00 for poor to choice; Kansas, old, \$10.50@12.00; new, \$8.00 for heating and \$10.00@11.50 for good to choice; Iowa, \$9.00@12.00 for fair to fancy. Rye straw sold at \$5.00@5.50.

For the week ending July 13 Prime Contract Timothy sold at \$5.75@5.85 per cental; Prime Contract Clover Seed at \$9.50; Hungarian at \$1.50@2.50; German millet at \$1.50@3.50; buckwheat at \$1.20@1.40 per 100 pounds. Receipts of hay for the week were 3,909 tons, shipments, 688 tons. The market for both timothy and Upland Prairie Hay—especially for old—ruled firm during the past week. Arrivals during the early part of the week were fair, but toward the close became quite small. A good local demand existed, and all sound hay met with ready sale. Some of the new hay was in bad order, being in a heating condition, and was slow sale, and could only be sold at a liberal discount from the price of sound hay. Inquiry for shipment moderate. Prices exhibit no material change. Sales of choice timothy ranged at \$14.00@15.50; No. 1, \$13.00@14.50; No. 2, \$12.00; mixed, \$7.00@11; not graded, \$11.50@14.00; thrashed, \$9.50; Illinois Upland Prairie, \$8.00@9.00; Indiana, \$6.50@9.50; Kansas, \$9.00@12.00 for fair to fancy; Wisconsin, \$8.50; Iowa, \$8.00@12.00 for poor to fancy. Oat straw sold at \$4.00, and rye straw at \$5.00@5.50.

RECEIPTS AND SHIPMENTS AT BUFFALO.

The receipts and shipments of grain and hay at Buffalo, N. Y., during the month ending June 30, as compared with the same period of the preceding year, were, according to Wm. Thurstone, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts by lake.		Shipments by canal.	
	1895.	1894.	1895.	1894.
Wheat, bushels....	910,100	2,978,233	464,105	2,755,379
Corn, bushels....	4,265,155	4,608,127	604,321	2,962,189
Oats, bushels....	3,599,910	2,484,199	1,041,752	1,187,110
Barley, bushels....	20,000	5,300	49,121	.....
Rye, bushels....	40,000	105,000	.....	53,954
Grass Seed, bags....	25	4,750	.....	.....
Flaxseed, bushels....	.....	19,000	.....	.....
Hay, tons....	1,055,950	1,510,570	.....	670
Flour, barrels....	.....	.....	.....	.....

RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the 5 weeks ending July 6, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels....	1,903,690	3,302,440	382,450	418,520
Corn, bushels....	68,390	124,280	20,230	45,450
Oats, bushels....	381,870	212,590	206,110	198,680
Barley, bushels....	1,930	2,910	6,720	1,720
Rye, bushels....	4,540	8,800	5,890	8,700
Flaxseed, bushels....	3,660	2,400	5,480	8,420
Hay, tons....	2,002	1,406	93	10
Flour, barrels....	9,506	13,058	777,058	835,006

RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the 5 weeks ending July 6, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels....	604,585	459,988	63,350	30,134
Corn, bushels....	130,000	91,000	1,540	14,300
Oats, bushels....	929,000	1,324,000	730,731	1,380,553
Barley, bushels....	116,800	76,390	70,400	12,800
Rye, bushels....	50,605	73,946	18,600	71,000
Grass seed, pounds....	1,340	6,290	48,000	.....
Flaxseed, bushels....	4,025	1,527	.....	.....
Broom corn, lbs....	.....	.....	.....	.....
Hay, tons....	1,017	1,214	72	.....
Flour, barrels....	185,115	264,170	269,223	387,760

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during June, 1895 and 1894, of seeds, hay and broom corn:

Repts.	Timothy, lbs.	Clover, lbs.	Other grass seeds, lbs.	Flax-seed, bu.	Broom corn, lbs.	Hay, tons.
1895 ..	224,445	11,320	427,460	93,858	218,000	14,973
1894 ..	124,030	3,030	273,760	53,450	387,180	19,196
Ships.						
1895 ..	657,505	33,860	685,626	43,411	519,162	1,913
1894 ..	206,868	8,065	1,020,746	58,578	627,289	3,396

RECEIPTS AND SHIPMENTS AT DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the 5 weeks ending July 6, as compared with the same period of the preceding year, were, according to Geo. M. Lane, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels....	75,206	82,879	139,648	238,151
Corn, bushels....	104,278	96,931	19,480	6,441
Oats, bushels....	152,936	131,859	4,258	2,752
Barley, bushels....	17,712	1,400	.....	.....
Rye, bushels....	2,270	591	.....	.....
Hay, tons....	1,130	1,256	.....	110
Flour, barrels....	16,793	13,444	11,175	9,237

RECEIPTS AND SHIPMENTS AT SAN FRANCISCO.

The receipts and shipments of grain and hay at San Francisco, Cal., during the month ending June 30, as compared with the same period of the preceding year, were, according to T. C. Friedlander, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, centals....	1,669,261	177,313	1,069,433	47,885
Corn, " " " " " "	12,480	23,033	7,131	29,311
Oats, " " " " " "	59,486	39,778	447	696
Barley, " " " " " "	122,593	72,159	51,513	15,658
Rye, " " " " " "	4,240	3,048	6	.....
Flaxseed, bushels....	1,351	.....	.....	.....
Hay, tons....	10,773	11,660	.....	.....
Flour, bbls....	111,820	59,129	83,096	64,883

RECEIPTS AND SHIPMENTS AT ST. LOUIS.

The receipts and shipments of grain and hay at St. Louis, Mo., during the month ending June 30, as compared with the same period of the preceding year, were, according to Geo. H. Morgan, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels....	309,778	201,220	509,389	128,031
Corn, bushels....	258,432	2,010,708	396,854	2,069,852
Oats, bushels....	612,440	536,168	169,214	244,855
Barley, bushels....	1,106	1,896	.....	942
Rye, bushels....	12,596	9,541	2,232	3,620
Hay, tons....	60,786	109,198	143,903	170,578
Flour, barrels....	.....	.....	.....	.....

RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the month ending June 30, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts.	
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VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, July 13, 1895, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany		20,000	75,000		
Baltimore	187,000	234,000	95,000	6,000	
Boston	58,000	239,000	86,000		
Buffalo	1,182,000	238,000	361,000	51,000	12,000
do afloat					
Chicago	16,871,000	2,370,000	1,785,000	35,000	3,000
do afloat					
Cincinnati	17,000	31,000	52,000	8,000	
Detroit	264,000	114,000	21,000	5,000	1,000
do afloat					
Duluth	7,268,000		205,000		1,000
Indianapolis	47,000	52,000	26,000		
Kansas City	71,000	46,000	64,000	2,000	
Milwaukee	190,000			4,000	9,000
do afloat					
Minneapolis	9,812,000	5,000	81,000		7,000
Montreal	129,000	9,000	199,000	4,000	1,000
New York	3,673,000	677,000	1,282,000	5,000	8,000
do afloat					
Oswego	8,000	6,000			9,000
Peoria	30,000	39,000	189,000		
Philadelphia	153,000	38,000	160,000		
St. Louis	194,000	514,000	92,000		
do afloat					
Toledo	283,000	285,000	37,000	12,000	
do afloat					
Toronto	24,000		23,000		
On Canals	120,000	614,000	378,000		
On Lakes	612,000	1,291,000	470,000		
On Miss. River		1,000	1,000		
Total	41,237,000	6,882,000	5,632,000	132,000	51,000
Corresponding date, 1894	53,154,000	3,934,000	1,745,000	194,000	93,000

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of June, 1895, was graded as follows:

WINTER WHEAT.

Railroad.	White.			Hard.			Red.			No G'de.
	2	3	4	1	2	3	1	2	3	4
C. B. & Q.	1	2			5	1		24	17	6
C. R. I. & P.					1	1		10	5	2
C. & A.					4			3	5	1
Illinois Central					1	1		1	10	
Freeport Div.								5		1
Galena Div. N. W.								10	4	1
Wis. Div. N. W.								1	7	1
Wabash	1				1			1	7	1
C. & E. I.								23	8	4
C. M. & St. P.	1	1			1	2				
Wis. Central										
Gr. Western					1			2		
A. T. & S. Fe.					2	4		4	2	3
Through & Spec					2	1		525	13	1
Total each grade	2	4			17	11		607	72	19
Total W. wheat	6				28				708	

SPRING WHEAT.

Railroad.	Colo-rado.		2		3		4		No Grade		White.		Mixed Wheat.	
	2	3	2	3	2	3	2	3	2	3	2	3	2	3
C. B. & Q.	16	2	2	3	2		2							
C. R. I. & P.			2		1									
C. & A.														
Illinois Central														
Freeport Div.					2	1								
Galena Div. N. W.					2	3								
Wis. Div. N. W.					1									
Wabash														
C. & E. I.														
C. M. & St. P.														
Wis. Central														
C. Gr. Western														
A. T. & S. Fe.														
Through & Spec					69									
Total each grade	16	2	76	8	4		2						2	
Total sp. wheat	18						90							

CORN.

Railroad.	Yellow.		White.		2		3		4		No Grade.
	2	3	2	3	2	3	2	3	2	3	
C. B. & Q.	388	38	81	8	403	75	29				4
C. R. I. & P.	123	17	10		212	37	21				1
C. & A.	174	6	51	6	487	46	3				3
Illinois Cent.	645	33	207	5	267	34	10				3
Freeport Div.	49	1	5	3	87	3	1				
Gal. Div. N. W.	57	3	3		55	3	12				
Wis. Div. N. W.		1			3	1					2
Wabash	158	5	127	8	229	13	1				
C. & E. I.	166	11	82	8	169	22	13				5
C. M. & St. P.	21	6		1	21	15	22				
Wis. Central					15						
C. G. Western	3				4						
A. T. & S. Fe.	28	5	4		106	4	1				
Thrh & Spcl	94	13	70	1	148	25	17				
Total each grd	1,906	139	591	38	2,099	282	130				18
Total corn											5,203

OATS.

Railroad.	White.			2			White Clipped.			No G'de.
	1	2	3	1	2	3	1	2	3	
C. B. & Q.	514		74	157	24					2
C. R. I. & P.	290		150	57	34					4
C. & A.	79		8	59	6					1
Illinois Central	87		10	306	9					
Freeport Div.	270		16	82	2					
Galena Div. N. W.	517		69	80	11					
Wis. Div. N. W.	141		27	4	7					
Wabash	56		11	55	9					
C. & E. I.	21		1	19	8					
C. M. & St. P.	674	143	107	26						9
Wisconsin Central	21		1							
C. G. Western	162		69	71	25					
A. T. & S. Fe.	101		15	65	3					
Through & Special	196		75	81	32					1
Total each grade	3,129	674	1,143	196						8
Total oats										5,159

RYE.

Railroad.	1			2			3			No Grade.
	1	2	3	1	2	3	1	2	3	
C. B. & Q.				9	1					
C. R. I. & P.				3	1					1
C. & A.										
Illinois Central				2						
Freeport Div.				4	1					
Galena Div. N. W.				9	1					
Wisconsin Div. N. W.				14	4					
Wabash				1						
C. & E. I.										
C. M. & St. P.				26	3					
Wisconsin Central				3	1					
C. G. Western				6						
A. T. & S. Fe.										
Through & Special				11	1					
Total each grade				87	14					1
Total rye										102

BARLEY.

Railroad.	Bay Brewing.		Chevalier.		2		3		4		5		No Grade.	Total No. Cars all grain by Roads.
	3	3	2	3	4	5	6	7	8	9	10	11		
C. B. & Q.				3	7									1,846
C. R. I. & P.				4	16		3						2	1,007
C. & A.														890
Illinois Central														1,630
Freeport Div.				1	16		3	1						504
Galena Div. N. W.					18		3						1	842
Wis. Div. N. W.				5	31		9	1						268
Wabash														692
C. & E. I.														530
C. M. & St. P.				10	40		1						2	1,168
Wisconsin Central					1		6							33
C. G. Western					10			1						872
A. T. & S. Fe.					1									349
Through & Spec'l														1,876
Total each grade				23	135		25	3					5	11,567
Total barley														191
Total grain, cars														11,507

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 23 months ending with June, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1894-95.	1893-94.	1894-95.	1893-94.
August	1,360,250	414,700	429,373	341,609
September	751,300	1,881,550	375,623	1,195,733
October	801,350	2,340,800	351,833	1,810,110
November	426,800	1,175,650	143,733	857,708
December	459,962	493,900	111,931	883,932
January	92,950	183,700	70,016	186,674
February	85,800	59,400	105,912	142,645
March	75,900	44,000	64,456	92,050
April	52,250	129,464	49,545	60,423
May	88,000	128,269	196,801	72,463
June	86,900	48,400	37,865	73,607
July		190,850		38,547
Total	4,281,462	7,093,683	1,937,088	5,285,498

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending July 13, as compared with same weeks last year, have been as follows:

	For the week ending July 13. July 14.		For the week ending July 6. July 7.	
	1895.	1894.	1895.	1894.
Wheat, bu.....	442,000	1,286,000	678,000	996,000
Corn.....	2,022,000	326,000	593,600	269,000
Oats.....	77,000	10,000	9,000	2,000
Rye.....				
Flour, bbls.....	213,000	278,000	239,000	266,000

ELEVATOR

GRAIN NEWS

An elevator is to be erected at Tiffin, Ohio.

St. Louis has twelve elevators and is building five more.

A 50,000-bushel elevator is being erected at Plainview, Ill.

Jipson & Baluss are building an elevator at Blissfield, Mich.

J. W. Curtis has erected a 10,000-bushel elevator at Richie, Mo.

Shields & Jacobs have started in the grain business at Eolia, Mo.

S. W. Dunlap and others are erecting an elevator at Woodlyn, Ohio.

S. Dunn & Sons of Lennox, will erect an elevator at Germantown, S. D.

Charles Ollentine, grain dealer of Lodge, Ill., may erect a new elevator.

D. Gregg is erecting a pneumatic steel storage elevator at Danville, Ill.

Simpson & Thompson, grain dealers at Greeley, Colo., have dissolved.

The Altoona (Fla.) Milling Company contemplates putting in a rice mill.

Wm. Stelter has purchased the elevator and flour mill at Mediapolis, Iowa.

J. C. Reynolds & Co. have erected a 10,000-bushel elevator at Sarcosie, Mo.

The Star Elevator Company of Minneapolis is remodeling its steam plant.

The Sylvia Milling and Grain Company has been incorporated at Sylvia, Kan.

C. N. Adlard has sold out his grain and coal business at New Carlisle, Ohio.

H. S. Goodman, dealer in grain, etc., at Bondville, Ill., is building an elevator.

Hagener Bros. have completed a new 40,000-bushel elevator at Beardstown, Ill.

The Tacoma Grain Company is building a grain warehouse at Wilbur, Wash.

F. Wolf of Spokane, Wash., may erect a large grain warehouse at Wilbur, Wash.

Tauton & Todd, grain dealers, are operating an elevator at Grand Harbor, N. D.

Henry Rickards, dealer in grain, hay and groceries at De Land, Fla., has sold out.

Masters & Hadley are building an addition to their grain elevator at Waldron, Mich.

J. D. Slawson is doing a good business buying and shipping corn at Bartlett, Texas.

Sutherland & Schultz of Astoria, Ill., have completed a new elevator at Summum.

Putnam & Robertson will build an elevator of 16,000 bushels' capacity at Fostoria, Mich.

The St. Louis Milling Co. has completed its new steel tank elevators at St. Louis, Mo.

Captain Alexander of Stephenville, Texas, is organizing a company to erect an oil mill.

S. M. Prouty has succeeded F. S. Clinton in the grain business at Weeping Water, Neb.

The Delta Construction Company will erect a 500,000-bushel elevator at New Orleans, La.

The Ann Arbor (Mich.) Milling Company will erect a 40,000-bushel elevator and a feed mill.

Alex. G. Vest, son of Senator Vest, recently opened a commission house at Kansas City, Mo.

An elevator is being erected at Pontiac, Mich., to store the crops raised on the asylum farm.

Maddon & Shannon are building an elevator in connection with a new mill at Hamiota, Man.

Joseph Fry is erecting an elevator at Middletown, Ind., to be run in connection with his mill.

A large grain warehouse has been erected at the San Joaquin Ranch, near Los Angeles, Cal.

Ferris & Bailey, commission merchants and seed dealers at Nashville, Tenn., have dissolved.

Mayor Spaulding has let the contract to L. O. Hickok for the erection of an 18,000-bushel elevator at Manokota, Minn. The equipment will consist of gasoline

engine, six-ton dump scales and Clipper Cleaner, the engine being placed in a brick engine room.

Allen N. Johnson and others are making efforts to have an elevator erected at Little Rock, Ark.

Hon. W. L. R. Johnson, grain dealer and banker at Buckley, Ill., has sold out his grain business.

The Harrison Switzer Milling Company of Belleville, Ill., is building an elevator at Imbs, Ill.

Tucker & Moriman have succeeded to the grain business of Roberts & Moschel at Morton, Ill.

H. C. Hailey has succeeded Hailey & Chamberlain, grain commission dealers at New Orleans, La.

Paul Smith, grain dealer at Decatur, Ill., has made changes and improvements in his grain office.

Charles Aydelott, city engineer of Peoria, Ill., has entered the grain firm of the Smith Hippen Co.

The Peavey Elevator Company has begun the erection of a 20,000-bushel elevator at Salem, S. D.

L. Lemcke has succeeded to the grain commission business of L. Lemcke & Co. at St. Louis, Mo.

Crohen, Mascoed & Co., grain commission dealers at New York City, have dissolved partnership.

C. E. Wheeler will erect a loading dump with 5,000 to 8,000 bushels' storage capacity at Emery, Ill.

Lyford Dow has overhauled his elevator at Davenport, Iowa, and is getting ready to receive grain.

The Charles Canning Grain Company of St. Paul, Minn., has changed its name to J. A. Todd & Co.

Bingham Bros. of New Ulm, Minn., have bought the Walbridge Elevator at Redwood Falls, Minn.

The Central Elevator Company has been incorporated at Indianapolis, Ind., to handle and store grain.

Dow & Curry are erecting a grain warehouse in connection with their oatmeal mill at Pilot Mound, Man.

La Rue & Minor have completed a new grain warehouse, with a capacity of 15,000 bags, at Woodland, Cal.

W. R. Bryan & Co., dealers in grain, etc., at Nashville, Tenn., have taken C. E. Hawkins into partnership.

E. L. Houghton of Fort Fairfield, Maine, is making arrangements to establish a starch factory at that place.

The International Cottonseed Oil Company is erecting a plant at Selma, Ala., including storage and seed-house.

A stock company has been organized at Williamsport, Ohio, and will shortly begin the erection of an elevator.

The Eyesenmayer Milling Co. of Springfield, Mo., is building a 50,000-bushel elevator in connection with the mill.

Benj. T. Watson, a wideawake young grain merchant, is just completing a new elevator at Chesterville, Ill.

London & Stoner, dealers in grain and feed at Gainesville, Texas, have been succeeded by London & Killgore.

W. A. Williams has removed from Nashville, Tenn., to Henderson, Ky., where he is carrying on a grain business.

Charles Ellis was recently arrested at Kansas City, Mo., on the charge of stealing grain from the Union Elevator.

L. J. Templeton & Co. have succeeded L. J. Templeton in the grain commission business at Minneapolis, Minn.

The Reichert Milling Company of Freeburg, Ill., is just completing a new 30,000-bushel elevator at Belleville, Mo.

Harry Herkimer has sold his grist mill at Maybee, Mich., to John Hasley and will move to Milan and buy grain.

Arends & Grimm will erect a 10,000-bushel elevator at Oliver, Iowa, a new town on the Burlington Railway, near Sibley.

R. J. Abbott has succeeded to the flour and grain commission business of R. J. Abbott & Co. at Fort Smith, Ark.

The Farmers' Elevator Company has been incorporated at Stonewall, Man., and will erect an elevator at that place.

The Denver & Gulf Railway is putting in extensive side tracks at Wheatland, Wyo., to facilitate the shipment of crops.

A linseed oil mill, with a capacity of 50,000 pounds of seed a day, is shortly to be erected at Sidney, near Victoria, B. C.

Duncan, Hollinger & Co., grain brokers at Lincoln and Omaha, Neb., failed recently. W. G. Beach, the local manager of the Lincoln branch, is accused of using the company's funds to speculate and that he is

\$20,000 short, but Mr. Beach says he is being made a scapegoat of. It is said that business will be resumed.

A. B. McCrillis & Co. of Springfield, Mass., have sued W. O. Collins to recover \$1,018.69 on a bill for hay and grain.

The Kiddoo Milling Company of Oswego, Kan., is making arrangements for the erection of a 20,000-bushel elevator.

Fleischmann & Co., distillers and yeast manufacturers at Cincinnati, Ohio, intend to build a 500,000-bushel elevator.

The Zenith Elevator Company is contemplating putting in additional wheat separators and scourers in its house at Duluth.

The Wilkinson Elevator at Buffalo, N. Y., was recently opened for the first time this season, receiving a cargo of wheat.

The Pratt Grain Company is making preparations to erect a large cornmeal mill at Decatur, Ill., which will cost \$75,000.

Arthur Armington's elevator at Elkhart, Ill., which burned some time ago, will be rebuilt with a capacity of 25,000 bushels.

Thomas Thompson, grain dealer of Brandon, has sold his elevator at Kemnay, Man., to the Ogilvie Milling Company.

The firm of E. E. Kendall & Co., dealers in grain, etc., at Milford, N. H., has been dissolved, Kendall & Wilkins succeeding.

The St. Anthony Elevator Company at Minneapolis has put in a 12-inch Corliss Engine bought of the Twin City Iron Works.

James Turner, formerly manager, and Grobisch Bros. have bought the stock of the Boody Elevator Company at Boody, Ill.

The New Athens (Ill.) Milling Company is increasing its storage capacity to 70,000 bushels by erecting two steel tank elevators.

Lewellen & Coontz, dealers in grain, etc., at Vandalia, Mo., have dissolved partnership, J. F. Coontz continuing the business.

The Monarch Elevator Company is making repairs to its elevator at Jamestown, N. D., and is overhauling its house at Eldridge.

Puterbaugh Bros., grain merchants of Mackinaw, Ill., have recently overhauled and improved their grain dump at that place.

I. F. Whiteside & Bro. of Jeffersonville, Ky., have been awarded the contract to furnish the hay and oats for the government depot.

The McDonald Engineering Company of Chicago is building honeycomb elevators at Farlin, Sheldahl, Crocker and Luther, Iowa.

Gier & Belz, contractors and dealers in lumber and coal at Conrad Grove, Iowa, write us that they are going to build an elevator.

The Northern Elevator Company of Winnipeg, Man., is erecting new elevators at High Bluff, Midway, Arden and Neepawa.

The Lake Park Grain & Lumber Company has purchased the grain and coal business of Stockdale & Rahls of Lake Park, Iowa.

The old Northern Pacific grain platform at Wilbur, Wash., is to be moved to another location and a buyer permanently placed in charge.

F. A. Hibbard & Co., commission merchants of Chicago, failed recently for about \$10,000, but say they will resume business soon.

Ross, Scott & Co. have succeeded to the grain business of Ross & Scott at Simcoe, Ont. Ross & Scott continue in business at Tilsonburg.

Timberlake & Co., grain commission dealers at Chicago, assigned recently with liabilities of about \$15,000. They will probably resume.

J. P. Nelson was recently tried at Ellendale, N. D., on the charge of embezzling \$2,500 from the Osborn Elevator Company and was acquitted.

The Gregg Bros. Grain Company will operate the public elevator at St. Joseph, Mo., formerly run by Haines Bros., whose lease has expired.

C. S. Fuller has just completed the construction of new grain bins, with conveyors, in the Culver Elevator on the Big Four R. R. at Lafayette, Ind.

H. Moore & Co., grain and hay dealers, have moved their offices in the Live Stock Exchange Building at Kansas City, Mo., to the Board of Trade.

The firm of Burns & Moulton, grain and hay dealers at Rock Island, Ill., has been dissolved, Charles Moulton continuing the business and William Burns retiring.

S. W. Edwards & Son have completed a new elevator and feed warehouse adjoining the old warehouse at Chicago, Ill. It is 120x85 feet, two stories in height and has a capacity of 30,000 bushels. There are 15 bins for grain besides a floor space of 11,000 feet for

hay, etc. The elevator will have a handling capacity of 1,000 bushels per hour. Power will be furnished by a 20-horse power gasoline engine.

The E. B. White Grain Company and P. P. Williams & Co. intend to build in East St. Louis, Ill., an elevator of about 500,000 bushels' capacity.

The Koppitz-Smith Mill Company has completed a new 30,000-bushel elevator at Pacific, Mo., and now has a storage capacity of about 50,000 bushels.

G. Montague & Co., general commission dealers of Chicago, assigned recently for about \$40,000, owing to the decline in wheat. Business will be resumed.

The James Clark Distilling Company has been incorporated at Cumberland, Md., and will make improvements and operate the Braddock Distillery.

Sheridan Bros. & Murray have recently organized at Bancroft, Iowa, to carry on a grain business. They have purchased the office and elevator of J. B. Carr.

Harwood & Co. have incorporated at Mattoon, Ill., with a capital stock of \$10,000 to deal in grain. Incorporators: Frank Kenyon, L. S. Baldwin and George Bouze.

Theodore Baxter has started a new elevator at Willeys, Ill. It is 10,000 bushels in capacity, has a West rn Sheller, and is run by a 16-horse power steam engine.

The Missouri Pacific Ry. is having plans drawn for a 1,500,000-bushel elevator to take the place of the Carondelet elevator, at St. Louis, Mo., which burned recently.

Frederick Smith & Co., dealers in grain, flour and coal, and Smith & Douglass, grocers, of North Manchester, Ind., failed recently, on account of wheat speculating.

Geo. W. McNear has purchased and taken possession of eleven grain warehouses near Fresno, Cal., in the San Joaquin Valley, which were formerly owned by the Grangers.

Carrington & Brigham write us that they have succeeded W. T. Carrington & Co., grain dealers of Toledo, Ohio. The firm is composed of W. T. Carrington and W. E. Brigham.

The American Commission & Produce Company has been incorporated at Chicago with a capital stock of \$15,000. Incorporators: A. A. Bruce, F. H. Wickett and Wilson Brooks.

W. B. Lysle, bookkeeper for Ingersoll & West, commission merchants of Sioux City, Iowa, disappeared July 10, and there is said to be a shortage on the company's books of \$20,000.

The Great Northern Elevator Company of Superior, Wis., has arranged to put automatic sprinklers in its plant. Most of the elevators at the head of the lakes are supplied with them.

Sharpnack & Co. have purchased the "grain exchange" formerly conducted by H. A. Messmore at Council Bluffs, Iowa, and will conduct a general grain and commission business.

A. J. Hoskins & Co. of Minneapolis, Minn., have discontinued the grain business. They operated about a dozen elevators on the Northern Pacific road, which they sold to Matthews Bros.

The Farmers' Elevator Company of St. Louis, Mo., has increased its capital stock from \$300,000 to \$350,000. The assets of the company are placed at \$525,000, and the liabilities at \$525,000.

The G. W. Shepard Commission Company has been incorporated at Milwaukee with a capital stock of \$20,000. The incorporators are: J. M. Crombie, G. W. Shepard and D. Laforce.

The first car of new wheat was recently received at Eppinger & Co.'s grain warehouse at Reedley, Cal. The same firm also forwarded the first car of new wheat shipped from that district.

The Deutsche Boersen Gesellschaft has been incorporated at Chicago with a capital stock of \$100,000 to deal in grain, etc. Incorporators: J. W. Herman, Joseph Brennmann and Conrad Frier.

Elward & Adams, grain dealers at Wabash, Ind., have dissolved partnership. Wils. Adams retiring. W. A. Elward will continue the business as heretofore at Wabash, Rich Valley and Lagro.

A. G. Berney's two elevators at Cass City, Mich., which have a capacity of 8,000 bushels each, have been purchased by A. Frutchey, E. A. McGeorge and A. Hale, who will carry on the business.

The Winona (Minn.) Mill Company is constructing a large flax cleaner with a capacity of 500 to 600 bushels per hour to be placed in the company's terminal elevator "A." It will cost about \$1,000.

The elevator and milling plant at Le Sueur, Minn., belonging to E. R. Smith & Co., has been purchased by Henry Wierwell, F. H. Schlegel and J. P. Funk. D. F. Chandler will be manager of the plant.

Crazed from despondency at the loss of his fortune, Joseph Davidson, grain broker at St. Louis, Mo., recently attempted to force his friend, J. R. Hamlin, the local representative of Swartz, Dupee & Co. of

Chicago, to give him money. Davidson had a revolver and threatened to shoot, but was finally quieted. Davidson has been arrested on the charge of insanity.

An iron bridge 62 feet long is being built between the two Shellabarger elevators at Decatur, Ill. It is about 40 feet from the ground and is designed to save time in going from one elevator to the other.

James Stewart & Co. have been awarded the contract for erecting a 125,000-bushel elevator at St. Louis, Mo., for the Geo. P. Plant Milling Company, which will increase its storage capacity to 250,000 bushels.

J. F. Williams & Sons are erecting a 100,000-bushel elevator adjoining their "Franklin Mill" at Columbus, Ohio. It is cribbed, has a brick veneer, two-story cupola and a working floor on level with tracks.

Mercer & Neal, grain dealers and millers of Peru, Ind., have bought the Wabash Elevator. This enterprising firm was organized 10 years ago by W. S. Mercer and J. A. Neal and now operates ten elevators.

The Chicago Pneumatic Steel Warehouse Company has secured five acres of land at Washington Heights, Chicago, upon which to erect a pneumatic steel elevator system. The capacity will be 1,000,000 bushels.

The Farmers' Warehouse Company of Garfield, Wash., at a recent meeting, elected officers for the year as follows: Bryan Westcott, president; J. W. Cox, secretary; M. Bryne, treasurer, and J. C. Lawrence, manager.

Metzger & Co., grain dealers at Dwight, Ill., received at their two elevators during May 66,550 bushels of corn, costing \$31,944, and 50,160 bushels of oats, costing \$15,824.80, which makes a good total of cash paid out in one month.

At the recent annual meeting of the stockholders of the Farmers' Elevator Company of Corona, S. D., the following Board of Directors was elected: H. C. Pew, J. C. Reeve, W. M. Jennings, J. A. Rickert, Aug. Hoffman, N. Kelly and J. A. Gaynor.

Dumont & Co., grain commission dealers of Decatur, Ill., have opened an office in the Board of Trade at Chicago, under the firm name of W. L. Dumont & Co. W. L. Dumont is manager of the Chicago office, A. S. Dumont of the Decatur office.

W. B. Hale, receiver for the Fry Grain Company of Rochester, N. Y., has reported that the total amount realized from the sale of the company's property was \$7.01, and that the charges for publication of sale, which have not yet been paid, were \$9.88.

The Castles Grain Co. has been incorporated at Fort Worth, Texas, for the purpose of constructing and maintaining grain elevators, wharves, warehouses, etc. The capital stock is \$50,000, the incorporators being W. W. Seley, Eugene Early and B. S. Castles.

The St. Clair Elevator Company has been incorporated at East St. Louis, Ill., with a capital stock of \$100,000. Incorporators, P. P. Williams, J. M. Dennis and James C. Stewart. A 750,000 bushel elevator will be erected for the company by James Stewart & Co.

At the annual election of officers of the Citizens' Grain Company of Artesian, S. D., the following directors were elected: Ed. Gass, H. W. Hesler, Jackson King, C. E. Hayter and R. E. Dowdell. The second year's business was closed with a surplus on hand.

The Interstate Stock and Grain Company has been incorporated at Kansas City, Kan., the capital stock being \$20,000. The directors are J. W. Hall of Argentine, D. R. Red and R. S. Miles of Kansas City, Mo., and A. A. McEwan and S. T. Moore of Kansas City, Kan.

McCray & Morrison, dealers in grain and coal, write us that they are building a 90,000-bushel elevator at Kentland, Ind., and are interested in a 95,000-bushel house at Earl Park, Ind. The company has elevators at Kentland, Raub and Beaver City, Ind., and at Effner, Ill.

The H. J. O'Neill Company of Winona is building a 30,000-bushel elevator at St. Charles, Minn., to take the place of the one burned there some time ago. It will be crib work covered with sheet iron and equipped with the latest machinery. Barnett & Record have the contract.

The Commercial Coal and Grain Company has been incorporated, to carry on business at Kansas City, Kan., Wichita and Eureka. The incorporators are as follows: R. Nichols, G. M. Calhoun and C. C. Furley of Wichita and C. A. Radford of Eldorado. The capital is \$10,000.

The firm of Rumsey & Chandler, dealers in grain, etc., at Chicago, Ill., has been dissolved, J. F. Rumsey, who has been associated with R. G. Chandler for nearly 15 years, retiring. The business will be continued by Mr. Chandler under the firm name of R. G. Chandler & Co.

John S. Metcalf & Co., elevator builders of Chicago, are making plans and specifications for a grain elevator with a capacity of 1,250,000 bushels to be built in St. Louis, Mo., for the Burlington Elevator Company, which was recently incorporated by Charles D. McLure, J. C. Van Blarcom, F. W. Biebing, Charles

Hodgman and Wm. L. Green Jr. Wm. L. Green Jr. is president. The capital stock of the company is \$150,000, paid in full, and the elevator will cost \$300,000.

Tuttle & Tuttle of Springfield, Ohio, have recently erected an elevator 30x34 feet and 60 feet high, which gives them 14,000 bushels additional storage capacity. They will put in a wheat separator, a hopper scale and a feed mill, and have put in a Smith Sheller and Cleaner made by Philip Smith of Sidney, Ohio.

Quillitch & Love, Trinidad, Colo., write us that the firms of H. R. Quillitch & Co. and Bowen & Love have been dissolved and the two companies consolidated and reorganized under the firm name of Quillitch & Love, H. R. Quillitch and Chas. E. Love comprising the new firm. They deal in grain, hay, feed, etc.

A large grain elevator, with a storage capacity of 100,000 to 125,000 bushels and facilities for handling 50 cars per day, will be erected at Columbus, Ohio. A company composed of E. W. Seeds, W. A. Hardesty, James Kilbourne, J. J. Stephenson, J. M. Dunham and H. C. Lonnie, has been incorporated for this purpose under the name of The Seeds & Co.

McCormick & Suffel, who have carried on a grain business at Superior, Wis., for a number of years, have closed out at that place. Mr. C. J. McCormick will remove to Hallock, Minn., and give his attention to his elevator and grain business at that place. He held the office of president of the Superior Board of Trade and was very well known at the head of the lakes.

The Isaac Harter Milling Company has let the contract to Riter & Connelly for the construction at Fostoria, Ohio, of three steel tanks of 140,000 bushels' capacity each, on the pneumatic system of the Steel Storage Elevator Company. These elevators will give the Harter Company about 1,400,000 bushels' storage and elevator capacity. The elevators will be operated by the Interstate Grain Storage Company, a stock company recently organized.

Coon & Churchill are preparing to erect another large elevator at Toledo, Ohio. It will be a modern house, similar to that of the new C. H. & D. elevator, and fully as large. It will have a 40 degree slanted grain conveyor, cover 200 feet intervening between the building and the river. The gentlemen in question, together with capitalists from out of the city, propose to build an elevator that will not be eclipsed anywhere in the country from point of size and modern facilities.

The Seattle (Wash.) Terminal Warehouse and Elevator Company, which was recently sold to the bondholders for \$125,000, during a year's operation ending June 12, under Receiver Nicoll, earned \$13,425.62, with an expense of \$20,490.18, a net loss of \$7,064.56, of which \$1,513.39 was on the warehouse and \$5,551.17 on the railway. The grain handled during the year was: Wheat, foreign, 15,620 tons, coastwise, 2,130 tons, locally, 2,040 tons; barley, 100 tons; total grain, 19,890 tons.

The suit brought by O. H. Perry of Perry, Benton & Aniehr, grain commission dealers at Duluth, against G. E. Clark and F. L. Davis, agent, of Minneapolis, has been decided in favor of the plaintiff. Plaintiff bought 10,000 bushels of wheat and carried it down at a loss until the market changed, when, it is alleged, the deal was closed, though the defendants had plenty of margin to protect themselves. Plaintiff was awarded the amount he put into the deal, \$583.28. The case may be appealed.

Wesley R. Davis, a well-known grain dealer of Rossville, Kan., disappeared recently, leaving creditors at his home, at Topeka and Kansas City, his indebtedness being about \$40,000. He had been speculating lately, when wheat went down and found him long. Two suits have been brought against him, one for the appointment of a receiver and an equitable distribution of Davis' assets among his creditors, and the other to set aside a transfer of some grain and other property by Davis to the Rossville Bank.

The Crescent Grain & Elevator Company of St. Louis, Mo., has completed an addition to its plant and expects to increase its business very largely during this season. H. B. Bilbro is president and manager of the company, and under his efficient superintendence the company has given perfect satisfaction. The business of the company has increased largely during his management. R. P. Thompson, who was prominent in the inauguration of the state inspection of grain in Nebraska, is with this firm and to his efforts much of its success is due.

The Stevens Mill and Elevator Machinery Company write us that "one of the finest elevators in the United States is being built by Henderson, Johnston & Co., at Pittsburg, Pa., and the plant is to be equipped with the latest improved machinery. One of the latest contracts let by that company was awarded to us, for the grain cleaning machinery to be put in their steel elevator, consisting of one L. O. Stevens Separator with a capacity of 3,500 bushels per hour, and an oat clipper that has a capacity of 1,500 bushels per hour, also three dust collectors and one large suction fan for carrying the hot air from the Stevens Feed Mill, of 500 bushels capacity per hour, thus making six machines in all that go to

the Henderson, Johnston & Co.'s steel elevator. The separator and oat clipper are to have iron frames and to be among the finest machines ever placed in an elevator."

The Winthrop Elevator Company has been organized at Winthrop, Ind., by John T. Nixon, John F. Deck and Ed Lippold of Attica and R. C. Burchin, William Hickman, James Rhodes and Clem Jones of Warren county. An elevator which is to cost \$3,500 is being erected and will be completed by August 1.

M. H. Long has disposed of his elevator plant at Elida, Ohio, and has purchased a half interest in a line of elevators on the C. & E. R. R. belonging to A. E. Clutter of Lima, and the firm name is Clutter & Long. They have recently rented the Gilliland Elevator on the Pennsylvania Railroad at Lima and operate seven regular houses with a cleaning house at Lima and a storage warehouse which they are building at Spencerville of 25 carloads' capacity. Their elevators are situated as follows: At Harrod, Lima, Conant, Spencerville, Elgin, Glenmoore, Ohio; Tocsin and Uniondale, Ind.

Among recent sales of the Witte Gas and Gasoline Engines are the following: One 25-horse power to Casey & Towers, Maurine, Mo.; one 25-horse power, Great Western Mfg. Co., Leavenworth, Kan.; one 10-horse power, A. W. Beck, Iola, Kan.; one 15-horse power, M. C. Harvey, Usher, Kan.; one 15-horse power, G. M. Bower, Lenexa, Kan.; one 10-horse power, F. Barteldes & Co., Lawrence, Kan.; one 5-horse power, John Hermann, Lawrence, Kan.; one 3-horse power, Chas. Fessmann, Eagle Pass, Texas; one 3-horse power, A. B. Keagy, Ellis, Kan.; one 3-horse power, Arnold & McAdow, Lamar, Mo.; one 5-horse power, Alfred Weston, Kansas City, Kan.



Joseph Murphy, formerly of Fairplay, Iowa, has gone into the grain business with Sheridan Bros. at Bancroft.

E. P. Bacon of E. P. Bacon & Co., the well-known grain firm of Milwaukee, has arrived home after an extended trip in Europe.

E. M. Sponsler, formerly of Davenport, has accepted a position with the Gregg Bros. Grain Company at Carleton, Neb., made vacant by the resignation of Thomas Hitt.

George Bingman, grain buyer at Bavaria, Kan., has established a reputation as a shot. A man was prowling around his house one night recently, and was obliged to carry away several shots from Mr. Bingman's gun as a souvenir of the occasion.

George S. Sanborn, who for many years has handled the cash grain department of Milmine, Bodman & Co.'s business at Chicago, has severed his connection with that firm, and will in future manage the similar department of the grain commission firm of J. F. Harris & Co.

A. C. Fetterolf of the International Navigation Company of New York City, who has had charge of the freight department of the Red Star Line steamers, having been with the company and their predecessors over 20 years, has resigned to take charge of the grain department of the Brooklyn Warehouse Company.

Mr. Louis Markoczy, engineer, and Dr. Joseph Creutner of Budapest, Hungary, recently came to the United States to study the elevator system, methods of constructing and equipping them and handling grain. Their visit will extend to about July 15, when they will have inspected elevators at Chicago, Duluth, Superior, Buffalo, New York and other cities.

T. J. C. Fagg Jr., manager of the Duluth branch of the Van Dusen-Harrington Company, and well known in the grain trade of the Northwest, was married to Miss Fanny Upham, niece of Governor Upham of Wisconsin, June 26. The wedding is said to have been one of the most brilliant that has ever taken place in Duluth. It was largely attended by prominent members of the grain trade from all over the Northwest.

English farmers have learned to use cottonseed meal and it is very largely taking the place that linseed meal used to have. It was the English demand for linseed meal for feeding that raised its price for many years, so that American feeders could not afford it.

Where an agreement calls for delivery by a certain time, and delivery is not made by such time, a subsequent delivery will be binding, provided the party to whom the delivery is to be made accepts and retains the property, as such acceptance is a waiver of the terms of the contract, so far as the time is concerned, and is evidence of a new contract, fixing a different time.

Fires, Casualties, Etc.

The elevator at Murdock, Ill., was burned June 8, together with considerable grain.

Youddall & Sinclair, dealers in grain, etc., at New Westminster, B. C., sustained a loss of \$4,000 by fire recently.

A high wind at Wahpeton, N. D., recently picked up a granary, carried it 25 rods and dumped it into a railway ditch.

J. R. Griffin, grain dealer of Goldfield, Iowa, was recently seriously injured while attempting to stop a runaway horse.

Maher Bros' grain and hay storehouse at Albany, N. Y., was burned recently. The loss was partly covered by insurance.

Wm. Clarey's grain warehouse at Covington, Ohio, was recently set fire by incendiaries and burned down. Loss estimated at \$4,000.

An elevator and grain office at Cazenovia, Ill., together with 4,000 bushels of grain, was destroyed by fire June 16, entailing a loss of \$7,000.

Albert Kopp, grain buyer at Wooster, Ohio, suffered a painful accident July 4. A can of powder exploded in his face, burning him very badly.

Thomas Bartlett's barn near Bicknell, Ind., was destroyed by fire recently, together with five tons of hay, 1,000 bushels of corn, etc. No insurance.

Harry Hartley, a prominent grain merchant of Remington, Ind., accidentally shot and killed himself in his elevator July 10, while shooting rats.

J. H. Johnson's elevator at Metamora, Mich., was burned June 16, together with 1,000 bushels of wheat. Loss \$12,000; insurance \$3,500. It will be rebuilt at once.

S. B. Barnett's barns at Wichita Falls, Texas, were struck by lightning and burned June 18, together with several thousand bushels of grain. Loss \$3,000; insured.

Smith, Northam & Co., grain and hay dealers of Hartford, Conn., sustained a loss of \$16,000 in the burning of their warehouse June 14. It was fully covered by insurance.

An apprentice painter at work painting the Union Elevator at Kansas City, Mo., fell from the roof of the house to the ground, a distance of 100 feet, June 14, being instantly killed.

The Great Western, the Bean and the Central Elevators at Fairfax, Minn., were destroyed by fire July 8, together with about 5,000 bushels of wheat. The fire was started by incendiaries.

George Nicholson & Co.'s corn crib at Henry, Ill., containing 25,000 bushels of corn, was slightly damaged by fire recently. The fire smoldered in the grain for hours before it could be extinguished.

An old grain warehouse at Junction City, Ohio, was destroyed by fire recently. It belonged to J. H. Shriver & Co., who will lose \$2,500. The building was leased by other parties and was not used to store grain.

Louis Prell's elevator at Columbus, Kan., was destroyed by fire on the night of June 28, together with considerable grain. A feed mill adjoining was also destroyed. The loss is estimated at from \$6,000 to \$8,000, with small insurance.

Fairbank's elevator at Dodge Center, Minn., was recently filled with wheat by Parsons Bros., when one of the sides burst out, about 2,000 bushels of grain running to the ground. The loss is mostly on the elevator, as the grain was saved.

W. R. Breckenridge's elevator at Otterbein, Ind., was burned June 28, together with a large quantity of grain. The fire originated in the cob house. The cob chute extended to the top of the elevator and acted as a chimney. Loss \$4,000; insurance \$3,000.

The elevator on the Downing farm near Mooreton, N. D., which belonged to J. F. Downing of Erie, Pa., was burned June 29, with 20,000 bushels of grain. The fire is supposed to have been set by tramps. Insurance on grain \$28,000; on the elevator \$1,500.

A. L. McLeod's grain warehouse at Forest Grove, Ore., together with a quantity of grain owned by farmers, and an adjoining flour mill, was destroyed by fire June 16. Loss on warehouse estimated at \$2,500, fully insured; on mill \$10,000, insured for \$2,800.

One side of Harrington & Smith's large grain warehouse at Seattle, Wash., collapsed recently and 600 sacks of oats were dumped into the harbor. Just half an hour before the accident the oats had been sold to Agassiz, Berry & Co. The oats were recovered after remaining in the water several hours and there may now be some difficulty as to the holding of the sale.

The piles of the dock had been eaten away by teredo, a small worm, which caused the house to settle.

The Gregg Bros. Grain Company's elevator at Sabetha, Kan., burned recently with a quantity of grain, on which there was an insurance of \$2,800.

A grain warehouse near Chesley, Ont., owned by John Adolphe, and leased by Wenger Bros. of Ayton, was destroyed by fire June 14, with the contents. Loss on the building \$1,700. There was about 5,000 bushels of peas and oats destroyed. Fully covered by insurance.

McCray & Morrison's elevator at Raub, Ind., was destroyed by fire June 26, together with 9,000 bushels of oats and 1,200 bushels of corn. There was no insurance on the grain; the building was insured for \$5,500. The total loss above insurance was estimated at \$6,000.

The Alliance Grain & Live Stock Co.'s Elevator at Putnam, Kan., was destroyed by fire June 15, together with about 12,000 bushels of wheat. It is supposed the fire started from spontaneous combustion. Loss \$10,000. There was a small insurance on the building and grain.

The Farmers' Alliance Elevator at Tipton, Ind., was destroyed by fire June 22, together with 1,000 bushels of wheat and corn and other property. The fire started by the friction of machinery at the top of the house. The loss is \$7,000; insurance \$2,000. The house was built in 1850.

Bartlett, Kuhn & Co.'s elevator at Terre Haute, Ind., was destroyed by fire at midnight of July 3. Nine cars of grain and ten cars of merchandise on side tracks were destroyed, together with a quantity of grain in the elevator. The building was valued at \$10,000; insurance on grain \$22,080, on building \$9,000.

Culp Bros' elevator and dump at Hastings, Ill., was set on fire June 24 by sparks from a passing engine and destroyed. It contained 12,000 bushels of corn belonging to Bartlett, Kuhn & Co. of Terre Haute, Ind., the loss upon which was fully covered by insurance. There was no insurance on the elevator. Culp Bros. will rebuild at once.

Elevator "D" at Indianapolis, Ind., which was built by the Indianapolis, Decatur and Western Railway Company and controlled by the Central Elevator Company, with Charles F. Robbins general manager, burned July 12, together with contents, which included 16,000 bushels of oats, 7,000 bushels of wheat and other grains. The fire originated from a hot journal. The estimated loss is \$75,000, with \$18,000 insurance.

RICE IMPORTS AND EXPORTS.

According to the last report of the Bureau of Statistics rice aggregating 90,000 pounds, valued at \$4,050, was admitted free of duty under reciprocity treaty with the Hawaiian Islands during May, against 505,000 pounds, valued at \$19,380, imported during May preceding; and during the eleven months ending with May, 5,144,087 pounds, valued at \$228,380, were imported, against 7,927,083 pounds, valued at \$311,396, imported during the corresponding months ending with May preceding.

Of rice imported free of duty none was exported in May, or in May preceding; and during the eleven months ending with May none was exported, against 8,830 pounds exported during the corresponding months ending with May preceding.

Dutiable rice amounting to 12,038,532 pounds, valued at \$176,557, was imported during May, against 13,077,072 pounds, valued at \$191,396, in May preceding; and during the eleven months ending with May 129,331,044 pounds, valued at \$2,025,159, were imported, against 64,878,642 pounds, valued at \$985,532 imported during the corresponding months ending with May preceding.

Of dutiable rice we exported 839,038 pounds, valued at \$12,432, in May, against 1,271,038 pounds, valued at \$21,080, in May preceding; and during the eleven months ending with May 9,161,243 pounds, valued at \$144,702, were exported, against 10,847,843 pounds, valued at \$191,267, exported during the corresponding months ending with May preceding.

Rice flour, rice meal and broken rice amounting to 9,554,506 pounds, valued at \$129,232, were imported during May, against 6,389,413 pounds, valued at \$92,224, imported during May preceding; and during the eleven months ending with May 70,409,982 pounds, valued at \$986,202, were imported, against 48,973,381 pounds, valued at \$743,061, imported during the corresponding months ending with May preceding.

We exported no rice flour, rice meal and broken rice during May or in May preceding; and during the eleven months ending with May 987 pounds were exported, against none exported during the corresponding months preceding.

He who would rescind a contract must put the other party in as good a situation as he was before, otherwise he cannot do it; and his complaint framed with this object, must state facts showing that he has performed or offered to perform on his part every act necessary to thus place such other party.



Louis Tetrault, hay dealer at Vercheres, Que., has assigned.

Alexis Prefontaine of St. Marc, Quebec, has patented a hay press.

Farmers of Summit County, Ohio, are cutting green grain on account of the shortage of hay.

The hay crop in Ontario, Canada is reported to be practically a failure on account of drouth.

Isaac J. Van Winkle has succeeded Crane & Van Winkle, hay and feed dealers at Passaic, N. J.

The New York Central's hay barns at East Buffalo, N. Y., burned June 28, with 1,500 tons of hay. Loss \$25,000.

It is reported that in Southwestern Michigan hay is so scarce that the farmers are planting millet to feed their stock.

H. H. King & Co. received the first car of new hay at Minneapolis, Minn., June 22. It came from Worthington, Minn., was a fair upland and sold at \$9.50.

The firm of Leavitt, Sanborn & Co., commission dealers in hay, straw, etc., at Boston, Mass., has dissolved, Mr. Sanborn retiring. Business will be continued under the same firm name.

The hay harvest in England is over, and it is reported that while in some districts the crop was exceptionally heavy, on the whole it is short. That country will continue to be a market for American hay.

The following named cities have adopted the rules of the National Hay Association for the grading of hay and straw: Chicago, Cleveland, Kansas City, Baltimore, Washington, Pittsburg, St. Louis, Cincinnati, Buffalo and Philadelphia.

The hay shipper should be a baler and shipper combined. It is always to his interest to have and run a good hay press. If a farmer does not know one grade from another the shipper will, and will be able to grade hay intelligently when baling.

It is said that on account of a largely increased crop and smaller consumption, there is a surplus of hay and lower prices in some parts of California. The crop in San Diego County was the greatest ever known, with a corresponding decrease in grain.

E. K. Lemont & Son, commission merchants of Philadelphia, report that on June 29 they received what they think is the largest carload of hay on record—383 perpetual press bales, weight 39,420 pounds, in P. R. R. car 69017. Anyone is challenged to report a larger car.

Too much care cannot be exercised in the culture and marketing of hay. Only a small portion of the crop is generally marketed, but on the whole it is twice the value of the wheat crop and nearly as valuable as corn. The surplus that is harvested should be given as much attention as grain.

Hay will never be handled satisfactorily to shipper, receiver and purchaser until proper hay terminals are provided. No one wants to buy a pig in a poke or hay in a car where only a few bales can be examined. Let the shipper, where possible, make his shipments over railroads which provide proper terminal facilities.

The John Mullally Commission Company sold the first car of new timothy hay at St. Louis, Mo., June 26, for \$17 per ton. Last year this company received the first car of timothy hay June 21, and the year before June 3. This year it received the first car of prairie hay on May 25, last year June 7, and the year before June 13.

Hay dealers at Kansas City, Mo., report that there is no hay in store at that point, and that often they cannot fill their orders. In the face of a short crop dealers solace themselves with the reflection, "It is probably just as well that we should have a short crop of hay considering the drawbacks in handling hay under existing tariff laws."

In 1894 the yield of hay was 17,445,000 tons less than in 1893, 8,679,000 tons less than in 1892, and 8,120,000 tons less than the average of the previous five years. The yield this year is variously estimated at one-half to two-thirds of 1894, say 24,000,000 to 32,000,000 tons, against 48,321,000 tons in 1894 and 65,766,000 tons in 1893. Notwithstanding the decreasing demand for hay, this deficit will call for a substitute and increase

the demand for feed. Elevator men who had the sagacity to deal in feed last year reaped a good profit, which will no doubt be repeated again this year.

All hay men should become members of the National Hay Association. All persons of good repute engaged in shipping or dealing in hay are eligible to become members, upon being elected by the Executive Board and upon payment of \$2 for annual dues. P. W. Pitt, secretary and treasurer, has an office in the Chamber of Commerce at Baltimore, Md.

A hay baler should have the very best presses, otherwise he may have to account for damaged hay and loss of business. In continuous baled hay let him see that there is no drawback on account of imperfect construction of the press or unskillful operation. It should not be necessary to jump on the hay to keep it down; the press box ought to be deep enough to receive the hay without that.

Very good profits have recently been made in shipping Canadian baled hay to the American market, says the *Trade Bulletin* of Montreal, low-priced hay bringing a profit of \$2 to \$4 per ton. Shipments are being made to Eastern states, and if the Western states have a short crop Canada may be expected to make it up. Canadian hay is still being attracted to Europe via New York on account of the low freight rates thence.

A sarcastic hay shipper gives this advice on how to load a car: "By all means get a grain car to load the hay in. Load with both grain doors down, and load against both the outer doors. This prevents parties from seeing the hay from the outside, and intending buyers prefer to have as little of it seen by them as possible. Again, it makes hard work to get the hay out of the car, but this pleases the receiver, for he hires his men to work. If you can't get a car with grain doors, put up temporary doors, and if you can't do either, don't ship."

A correspondent in London, England, writes: "There should be some bright times ahead in Canadian hay, if present conditions prevail in English meadows, and in any case the situation is better than that of last year as far as shippers are concerned. A deal of the hay has already been carried, and the result is far from satisfactory to the farmer. Unless the second cutting should be greatly more favored than the first, stock will require food from foreign sources to a much greater extent than in the past two or three years."

The New Jersey Legislature recently passed a law to take effect September 1 relating to baled hay and straw. It provides that no one shall sell baled hay or straw with more than 10 pounds of wood to a bale of 200 pounds and upward or more than 5 pounds of wood on bales less than 200 pounds in weight; that the weight of all bales be marked thereon, and no one shall sell a bale which weighs less than stated after deducting 5 pounds for shrinkage. The law prohibits the concealing of anything in a bale for the purpose of increasing the weight, making the violation of the law punishable by a fine of \$250 or imprisonment for six months, or both.

The hay trade in Paris, say Drissler & Co. of Paris, France, in a recent number of the *Hay Trade Journal*, is entirely in the hands of commission merchants who handle this trade as a specialty. These firms cover their demand from the traders in the country, the farmers, or on the hay-auctions which take place regularly in the suburbs of Paris, almost every day. There are very few buyers who buy otherwise than by the intermedium of these commission merchants. Although they have to pay a small commission, the buyers have many advantages; they may take any quantity they like, and at any time, without the trouble of going to the far-off markets and losing their time. Contracts for the army, the cab, omnibus and tramway companies are all taken over by these commission merchants. These contracts generally extend over one year.

HAY IMPORTS EXCEEDS EXPORTS.

According to the last report of the Bureau of Statistics, hay aggregating 16,046 tons, valued at \$109,759, was imported in May, against 9,308 tons, valued at \$79,609, in May preceding; and during the eleven months ending with May 175,042 tons, valued at \$1,245,768, were imported, against 73,486 tons, valued at \$649,691, imported during the corresponding months ending with May preceding. Of imported hay we exported none in May, or in May preceding, and during the eleven months ending with May, 45 tons were exported, against 229 tons, valued at \$2,026, exported during the corresponding months ending with May preceding.

We exported 3,544 tons of domestic hay, valued at \$50,889, during May, against 4,224 tons, valued at \$70,928, in May preceding; and during the eleven months ending with May 43,740 tons, valued at \$646,493, were exported, against 50,447 tons, valued at \$823,010, exported during the corresponding months preceding.

The stockholders of the Interstate Grain Palace Association held their annual meeting at Aberdeen, S. D. A grain palace will be built and an exhibition will be held this year at Aberdeen, which is expected to surpass the successful exhibition of last year.

ITEMS FROM ABROAD

Flaxseed is very scarce in Argentine; there is none on offer, neither is there any on hand for sale.

The French Chamber of Deputies has approved the proposed duty of 57 cents per 100 kilos on oats.

The *Review of the River Plate* says the acreage of wheat and flax seed in Argentine will be largely increased this year.

During the year 1891, the Central Argentine Railway carried 623,592 metric tons of grain and flour, as against 489,757 tons in 1893, and 78,124 tons hay, as against 72,553 tons in 1893.

During May Sweden imported 40,000 quarters, of 480 pounds each, of wheat and 2,500 sacks flour. From August 1 to end of May the total import of the two articles was 758,000 quarters, compared with 610,000 quarters in the corresponding period last season.

There are indications of a growing tendency in Belgium to impose duties on cereals imported. A bill recently introduced into the Belgian Parliament provides for the levying of duties on many raw materials and imported articles. A duty of 2 francs per 100 kilos (about 38 cents per 220.46 pounds) has been adopted.

Exports from Argentine from January 1 to June 20 included 27,479,000 quarters, of 480 pounds each, against 4,596,000 quarters during the same time in 1894, 2,911,000 in 1893, 1,284,000 quarters in 1892; shipments of corn amounted to 364,000 quarters against 208,000 quarters during the same time in 1892.

Exports from Russia from Aug. 1, 1894, to June 22 included wheat 19,148,000 quarters against 15,295,000 quarters, of 480 pounds each, during the same time of the previous season; corn, 3,022,000 quarters against 4,582,000 quarters, of 480 pounds each; barley, 11,926,000 quarters against 14,367,000 quarters, of 400 pounds each.

There is a controversy waging at Liverpool as to whether "f. o. b." means free on board or something else. Trouble arose over a seller declining to empty sacks of bran down a chute into a vessel, claiming that he was keeping his contract of f. o. b. by merely delivering it on board, it therefore devolving upon the shipper to empty the sacks.

William Goodwin, writing from Buenos Ayres, Argentine, under date of May 30, says the damp, foggy nights were delaying the curing of the maize crop, and the surplus for export was estimated at 7,000,000 quarters. With regard to the wheat surplus, it is doubtful if it will reach 4,600,000 quarters. The higher prices have led to an increase in the acreage.

The total shipments of wheat from India from April 1 to July 1 aggregate 8,384,000 bushels, of which 5,816,000 bushels went to the United Kingdom and 2,568,000 bushels to the Continent. The total shipments for the corresponding time last year were 3,520,000 bushels, of which 2,360,000 bushels went to the United Kingdom and 1,160,000 bushels to the Continent.

A private letter from Rosario, Argentine, dated May 28, says that the rise has come just in time to induce farmers to keep up their wheat acreage. "They are now plowing with enthusiasm. The maize crop is huge in the province of Buenos Ayres, here in Santa Fe it is only middling—only a flea bite compared with Buenos Ayres. I expect it will take Europe all her time to absorb the surplus. It is not conditioning as well as we expected, the weather is too open and wet."

The last official crop report of India gives the acreage and estimated yields of wheat crops as follows: In the Hyderabad Assigned Districts, acreage 889,326, previous year 928,482; estimated yield 79,620 tons, previous year 96,536 tons. In Northwest Provinces and Oudh, total acreage 4,614,098, yield 1,141,297 tons; average acreage ten years 4,907,007, average yield 1,712,031 tons. In the Bombay Presidency, total acreage 3,266,663, previous year 3,055,906, estimated yield 933,897, previous year 922,787, average acreage 9 years 2,319,153.

The allowance of days of grace will be abolished in Pennsylvania Jan. 1, 1896, and paper falling due on Sunday or a legal holiday shall be deemed to be due on the next secular business day thereafter.

The sequel to the Senator Fair wheat deal is now coming out. The firm of L. W. McGlauffin & Co. have disagreed, and Mr. McGlauffin recently brought suit against his partner, Eugene S. Bresse, for an accounting, charging embezzlement and with having destroyed papers and mutilated records. A receiver of the company has been appointed. Both the bookkeeper, Charles Smith, and Mr. Bresse have disappeared. Of the former no word has been received, but the counsel for Mr. Bresse says he will return in good time.

CROP : CONDITIONS.

[Readers will confer a favor by sending us reports each month of the acreage and condition of growing crops, the amount of grain and hay in farmers' hands and stocks in store, for publication in this department.]

NORTH DAKOTA, CAVALIER, PEMBINA Co., July 1—Crops were never better in this vicinity. W. H. CODE.

SOUTH DAKOTA, FRANKFORT, SPINK Co., July 10—The crops in this vicinity are in fine condition. PACKHAM & MURPHY.

KENTUCKY, NEW HAVEN, NELSON Co., July 1—Threshing has begun. New wheat is selling at 65 cents. F. C. STRENFERT.

CALIFORNIA, July 5—All reports from interior points agree that the yield of barley will be large and that the quality will average high.

QUEBEC, QUYON, PONTIAC Co., July 9—Crops here are the best we have had for a number of years. We look for good times. L. H. BROWNLEE.

OHIO, LIMA, ALLEN Co., July 7—Wheat about half of an average crop; many grains are shriveled. We are still getting some old wheat. HALL & WOODS.

OHIO, LIMA, ALLEN Co., July 6—Wheat about 60 per cent. of a crop. Some grains are shriveled. Oats and hay short crop. Corn is doing nicely. CLUTTER & LONG.

MISSOURI, GALT, GRUNDY Co., June 29—Crops are good all around here. We have had plenty of rain and there will be over an average crop of wheat. JOHN S. COOKSEY.

INDIANA, LINN GROVE, ADAMS Co., July 12—New wheat is coming in thick and fast. The crop will make about 40 per cent. of what is usually raised in this district. The quality for the most part is good; some will test 63 pounds. S. M. CLARK.

CALIFORNIA, July 5—The *Commercial Bulletin* of San Francisco reports that the progress of harvesting reveals marked, but not unexpected, inequalities in the quality and quantity of wheat, and confirms moderate fears expressed several weeks ago.

OHIO, CARDINGTON, MORROW Co., July 8—Wheat about 50 per cent. of an average crop, quality fair. Oats about 70 per cent. of an average. Corn never looked better. Hay not over quarter of a crop. Potatoes small. We need rain. GEO. W. DAWSON.

MINNESOTA, MILAN, CHIPPEWA Co., July 11—Wheat has been damaged considerably by frost and dry weather in this vicinity. I do not think the crop will be larger than last year. Milling wheat is very scarce and there is very little grain in farmers' hands. G. GRAHAM.

OHIO, SPRINGFIELD, CLARKE Co., July 8—Wheat yield is about half of an average crop and 40 per cent. of crop of 1894. The quality is very poor. Oats are good for an average crop of good quality. Corn never looked finer. Hay is about 25 per cent. of an average crop. W. F. TUTTLE.

MICHIGAN, JENISON, OTTAWA Co., July 10—The wheat crop is about all harvested. The acreage was small compared with other years, and farmers say that there is only about half a crop. Oats will be light on account of the dry weather. Rye is about an average crop. Corn is looking good at present, but needs rain. J. H. BALKEMA.

ILLINOIS, SULLIVAN, MOULTRIE Co., June 20—The corn crop will be a fair average. Wheat will be only one-tenth of last year's crop, as it has been killed by frost and flies. Oats will be about one-third of last year's crop. The acreage was larger than last year, but considerable was plowed up and planted to broom corn. FARLOW & FLEMING.

NEW YORK, NEW YORK Co., June 29—From very many points reports come to us of a short crop of hay. The trade here is not sufficiently impressed as yet to boom prices, although they are advancing. The end of the week finds very little on this market, the top being, for choice timothy 90 cents and down to 65 cents. H. DUSENBERY & CO.

PENNSYLVANIA, FAIRPLAY, ADAMS Co., June 28—Wheat is now being harvested and seems to be well filled. The acreage is not as large as last year's, owing to low prices. Farmers in this section have been turning their attention to raising barley for the last year or two, but as it was only a half a crop this year many of them say they will sow no more, which would seem to indicate a larger acreage of wheat next year. Millers have been paying Baltimore prices for wheat, and in some instances a few cents per bushel more. J. LEWIS RHODES.

INDIANA, INDIANAPOLIS, July 8—Good rains in the central and southern portions did much good, but in the northern portion no rain fell except in very few localities, and rain is much needed to save corn and potatoes, which in many fields begin to wilt. In the southern and central portions corn has grown rapidly and stands well in clean fields, much refreshed by late rains; in good fields corn is laid by in many counties; chinch bugs are doing damage in many corn fields in some counties. Potatoes are in fair condi-

tion. Wheat is in shock nearly everywhere, and thrashing has commenced in most counties; in many counties the yield is better than expected, still the shocks stand far apart in many fields; the grain is plump in most fields, but the straw and heads are short. Rye is all cut, and thrashing continues with a fair yield. Oats are ripening fast; in few localities cutting has commenced; many fields were improved by favorable weather the last two weeks; the heads filled well and the straw long enough for binding.

MICHIGAN—The state report, issued July 8, says: For this report on wheat more than 1,100 returns have been received, representing all parts of the state. The correspondents estimate the yield per acre in bushels and not in percentage of previous or average crops. The average of the estimates for the state and each section is as follows: State, 9.88 bushels; southern counties, 9.14 bushels; central counties, 11.13 bushels; northern counties, 11.82 bushels, and Upper Peninsula, 14 bushels. The estimate for the state is the lowest ever made July 1; it is nearly 6 bushels lower than the estimate of July 1, 1894, and nearly 7 bushels lower than the average yield in the eighteen years, 1876-1893. The light crop is mainly because of the drouth that has prevailed all the season and still continues, yet other causes have worked more or less injury. A correspondent well says: "Light top last fall, freezing and thawing in spring, frosts in May and drouth in April, May and June." To these should be added extensive damage by insects. The number of bushels of wheat reported marketed in June is 522,311, and amount marketed in the eleven months, August-June, 10,569,800 bushels. The acreage planted to corn is slightly in excess of the average, and the condition is 91 per cent. of condition in average years. Oats are estimated at 61 per cent. of an average crop. The average for the southern counties is only 57 per cent. The acreage planted to potatoes is 6 per cent. in excess of average years, and in condition the crop promises 86 per cent. of an average crop. Corn and potatoes seem to have stood the drouth remarkably well. If an abundance of rain comes soon both crops may be expected to yield fairly well. Meadows and good pasture were probably never in poorer condition at this date, and the spring seeding to clover is nearly all lost.

GOVERNMENT CROP REPORT—The July returns to the Statistician of the Department of Agriculture make the acreage of corn 107.8, as compared with the area planted in 1894, which was a little over 76,000,000 acres, being an increase of 6,000,000 acres, aggregating in round numbers 82,000,000 acres. The averages for the principal corn states are: Ohio 104, Michigan 104, Indiana 104, Illinois 105, Wisconsin 105, Minnesota 112, Iowa 106, Missouri 107, Kansas 117, Nebraska 107, Texas 112, Tennessee 107, Kentucky 102. The average condition of corn is 99.3, against 95 in July last year and 93.2 in 1893. The average condition of corn by states is: Ohio 91, Michigan 90, Indiana 95, Illinois 92, Iowa 105, Missouri 100, Kansas 104, Nebraska 95, Texas 118, Kentucky 96, and Tennessee 98.

The average condition of winter wheat is 65.8, against 71.1 in June and 83.2 last July. The percentages of the different states are: New York 78, Pennsylvania 88, Kentucky 85, Ohio 60, Michigan 69, Indiana 52, Illinois 50, Missouri 68, Kansas 42, California 82, Oregon 95, Washington 93.

The condition of spring wheat is 102.2, against 97.8 in June and 68.4 in July, 1894. State averages are: Minnesota 112, Wisconsin 98, Iowa 109, Kansas 46, Nebraska 80, South Dakota 112, North Dakota 102, Washington 94, Oregon 90.

The average condition for all wheat of the country is 76.2.

The condition of oats is 83.2, against 84.3 in June and 77.7 July 1, 1894. The condition of winter rye is 82.2, of spring rye 77, and all rye 80. The average condition of barley is 91.9, against 90.3 in June, an increase of 1.6 points.

The average condition of rice is 84.4, of potatoes 91.5, of tobacco 85.9. Acreage of potatoes 107.9, and of tobacco 84.8 per cent., compared with 1894.

OHIO—The July report of the Ohio Department of Agriculture gives the following data: Condition of wheat 58, barley 65, oats 60, corn 85, potatoes 74, timothy 40, pastures 56, the comparison being with a full average. Acreage of wheat sown 2,278,431, plowed up 2.4 per cent.; estimated area for harvest 2,221,534 acres. Barley 14,842 acres. Rye 38,430 acres sown, 1.4 per cent. plowed up, 37,921 acres for harvest. Oats 981,456 acres sown, or 98.2 per cent. compared with last year, 964,032 acres for harvest. Corn 2,828,517 acres planted, 101 per cent. compared with 1894; estimated area for 1895, 2,853,535 acres; damage by grubworm, 12 per cent. Clover, three-fourths ton; produced per acre; damage by grubworm, 4 per cent.; quality, 76 per cent. Potatoes 144,253 acres, 101 per cent. compared with 1894. Tobacco acreage 66 per cent. compared with 1894.

The report says: There can now be no doubt as to the shortage of the wheat crop. Prospect has been on the decline for the past two months, and during June dropped ten points, according to the best estimates. Present indications point to a crop from sixteen to twenty millions short of a fair average, and even more compared with the abnormally large crop of last year.

Corn shows a slight increase in area as compared

with last year, and while condition is not generally good at this date, there is yet time for the making of a good crop, with favorable weather conditions. Recent rains in many localities have been of great benefit to the corn crop, and farmers have been able to cultivate to advantage. In some localities the last cultivation has been given.

Potatoes have an increased area as compared with last year, but prospects are low. The most favorable weather must occur to make more than 75 per cent. of an average crop.

Timothy hay was very short over the entire state; in many localities almost an entire failure.

Corn and clover have been damaged considerably by white grubworms.

Altogether the crop prospects for 1895 are far below even a fair average.



THE SAME OLD GAME.

A La Salle street bucket shop has been writing its customers who have been sent drafts for their profits, not to present them for thirty days, as they have made heavy losses and are hard up. Some of these letters are coming back to the commission houses here and the chances are that they will either be forced to meet the drafts or be closed up. The house has a very unsavory reputation, and its manager has never been known to pay anything that he could get out of. They have been frequently roasted in the papers, but the country suckers do not appear to catch on.—*Inter Ocean*.

INCREASED USE OF RYE.

A large portion of the recent immigration from Europe is composed of people who have all their lives been used to rye bread. Coming here they retain their original liking, and this is leading to more growing of rye in place of wheat in some parts of the West. The rye crop is much less exhaustive of fertility than is wheat, and to the extent that it can be substituted for wheat as food this country will be the gainer, at least in saving fertility. Rye is fully as nutritious as wheat, and its flour has a sweet taste because it has more gluten than has wheat flour. Combined with Indian meal, which makes the loaf lighter and more porous, rye flour makes a bread that is at the same time palatable, nutritious and easily digested.—*American Cultivator*.

SPECIAL RATES.

Some of our grain men are incensed over the discovery of the fact that, although the rate on oats from certain points west to Montreal is 14 cents per 100 pounds according to the schedule issued by the Grand Trunk, certain parties have been getting a special rate of 7 cents per 100 pounds from the same points for about a month past. Consequently, those who were apprised of this special rate had a big advantage of 2½ cents per bushel over the general public. Some of our grain men here wondered how others could undersell them to the tune of 2½ cents per bushel; but as soon as they found out by the merest accident that a special rate of 7 cents per 100 pounds, in the place of 14 cents per 100 pounds, had been given, and that they were working on a wrong basis, the mystery was explained. It was, however, a most unjust piece of business on the part of the company.—*Montreal Trade Bulletin*.

THE CARLOAD IS THE PROPER UNIT OF TRANSPORTATION.

It is difficult to understand how a man thoroughly posted upon the principles underlying railway transportation can consistently defend the wholesale and retail principle of rates except so far as they apply to the various units of transportation. Of these units there are three; first, the hundredweight, barrel or ton; second, the carload; and, third, the trainload. It will be generally conceded that the man who ships fifty packages (so long as it does not constitute a carload) is entitled to no better rate than fifty men, each of whom ships a single package; but somehow it is claimed that a man who ships fifty cars should have an advantage over fifty shippers of a single car each, notwithstanding that in the former case considerable extra labor is involved by the large number of shippers, while in the case of the carloads the labor is identical. That is to say, the transportation of fifty consignments of a single barrel of flour each creates more work in the way of billing, handling, etc., than do fifty barrels in one consignment; but it does not involve any more labor to forward fifty carloads of flour in separate consignments than it does to forward the same number of cars from a single shipper to a single destination. Railways are public carriers, not industrial promoters; a fact that appears to be as difficult of perception as any in connection with the railway problem.—*Railway Review*.

IMPORTS AND EXPORTS OF FOREIGN BREADSTUFFS.

The total value of breadstuffs imported during May, according to the last report of the Bureau of Statistics, was \$336,840, against an amount valued at \$90,807 in May preceding; and during the eleven months ending with May, breadstuffs valued at \$2,777,478 were imported, against an amount valued at \$2,009,644 imported during the corresponding months ending with May preceding.

Barley aggregating 2,111,670 bushels, valued at \$365,273, was imported during the eleven months ending with May, against 779,069 bushels, valued at \$353,105, imported during the corresponding months of the year preceding. Corn aggregating 12,889 bushels, valued at \$6,105, was imported during the eleven months ending with May, against 2,142 bushels, valued at \$1,455, imported during the corresponding months preceding.

Oats amounting to 307,790 bushels, valued at \$80,692, were imported during the eleven months ending with May, against 6,102 bushels, valued at \$3,049, imported during the corresponding months of the year preceding. Rye amounting to 12,840 bushels, valued at \$6,133, was imported during the eleven months ending with May, against 50 bushels imported during the corresponding months of the year preceding.

Wheat aggregating 1,395,450 bushels, valued at \$848,236, was imported during the eleven months ending with May, against 967,841 bushels, valued at \$643,260, imported during the corresponding months of the year preceding.

Of imported breadstuffs an amount valued at \$119,491 was exported during May, against an amount valued at \$11,680 in May preceding; and during the eleven months ending with May breadstuffs valued at \$224,304 were exported, against an amount valued at \$74,385 exported during the corresponding months of the year preceding.

Imported barley aggregating 10,272 bushels, valued at \$5,505, was exported during the eleven months ending with May, against 17,485 bushels, valued at \$8,760, exported during the corresponding months ending with May preceding. Imported wheat aggregating 318,189 bushels, valued at \$206,129, was exported during the eleven months ending with May, against 70,376 bushels, valued at \$43,999, exported during the corresponding months ending with May preceding.

IMPROVED ROADS.

The *Engineering Record* says: "The states of New Jersey and Massachusetts have performed the greatest possible service for the improved roads question, both by the systematic legislative treatment of the subject and by the actual construction of several hundred miles of roads of the best modern type. There is no argument so forcible or conclusive as actual accomplishment in connection with any debated matter. It is only a short time since an expenditure of even \$2,000 or \$3,000 per mile on a country road would effectually have discouraged many communities which could well afford to spend much more to their material advantage, and it is but a few years ago that the contemplation of a cost of \$5,000 or more per mile would have appalled most county and state authorities. Now, however, good roads constructed and in use in many states have changed all that by the demonstration of accomplishment. It has been shown that appreciation in the value of real estate gained through the close proximity of good roads is an abundant return on the cost of improved highways. Indeed, this conviction has found so general acceptance in some states where substantial advantages from the construction of good roads have accrued that the right of counties to bond themselves for this species of public improvements has been extended to townships, as is the law in New Jersey, where a number of towns have already availed themselves of the powers granted by the enabling act.

"The actual construction of good roads has not only made clear their intrinsic merits, but it has also demonstrated the inherent viciousness of the old system

of so-called 'repairs' of country roads. The last report of Edward Burroughs, state road commissioner of New Jersey, shows that nearly \$800,000 was raised in that state in the year just closed and expended under the old system of road patching in accordance with the ignorant, though well-meaning and utterly wasteful, notions of the country roadmaster. Mr. Burroughs considers that that sum was essentially thrown away, and he is undoubtedly correct. Under good engineering management at least 200 miles of good roads for country purposes could have been constructed for that sum of money, whereas in three or six months' time there will be practically nothing to show for it."

A COAL HANDLING PLANT.

The cut given herewith illustrates a plant for handling coal, recently installed by the Jeffrey Manufacturing Company, Columbus, Ohio, for the Kineon Coal Company of Cincinnati. The lump coal is dumped from the cars on tracks above the storage pockets. As this lump coal is delivered to wagons it is screened in the chutes; the nut and slack being taken out and binned under the pockets. From these bins it is loaded into tram cars of two tons' capacity, operated on tracks beneath the pockets. These cars are emptied on both sides of the building into hop-



COAL HANDLING PLANT OF THE KINEON COAL COMPANY, CINCINNATI, O.

pers. Connecting these hoppers with the elevator boots fourteen feet below the surface of the ground, are screw conveyors of heavy build and capacity to feed the elevators.

The elevators are of the continuous bucket type, with massive wrought steel buckets securely bolted to a wrought steel chain of a new and improved type recently put on the market by the Jeffrey Company. These elevators spout coal either to pockets, from which it is delivered to wagons for distribution, or direct to cars on the overhead tracks.

The power to drive the machinery is transmitted by manilla rope, the engine and boiler being at the extreme south end of the building. Friction clutches conveniently placed give the operator perfect control of the driving machinery. In every detail the plant is built with a view to giving great strength, durability and capacity, either elevator handling two tons of slack coal in forty-five seconds at a nominal speed, which capacity can be increased as necessity demands.

This combined system of tram cars and elevators, with its possibilities of increasing the capacity at will, supersedes a system of drag chain conveyors that on trial proved totally inadequate to perform the somewhat severe duty imposed on it. Any buyer of this class of machinery will, on careful examination of this plant, agree that the Jeffrey Company is fully competent to install outfits capable of doing the heaviest work.

Days of grace were abolished in Illinois July 1 by a law passed by the late legislature; and the rights of the lawful holders of promissory notes payable in money and the liability of all parties to or upon said notes shall be the same as that of like parties in inland bills of exchange according to the custom of merchants. This last makes the indorser's liability equal with that of the principal.

SEED EXPORTS AND IMPORTS.

Seeds valued at \$50,467 were exported during May, according to the last report of the Bureau of Statistics, against an amount valued at \$55,367 in May preceding; and during the eleven months ending with May, seeds valued at \$2,837,439 were exported, against an amount valued at \$7,930,321, exported during the corresponding months ending with May preceding.

Clover seed aggregating 235,399 pounds was exported in May, against 137,315 pounds in May preceding; and during the eleven months ending with May 22,903,432 pounds, valued at \$2,124,797, were exported; against 45,417,833 pounds, valued at \$4,540,772, exported during the corresponding months ending with May preceding. Cottonseed aggregating 348,444 pounds was exported during May, against none exported in May preceding; and during the eleven months ending with May 10,087,101 pounds, valued at \$80,651, were exported, against 5,332,516 pounds, valued at \$41,033, exported during the corresponding months ending with May preceding.

There were 35 bushels of flaxseed exported during May against 1 bushel in May preceding; and during the eleven months ending with May 1,352 bushels, valued at \$1,454, were exported, against 2,047,834 bushels, valued at \$2,426,280, exported during the corresponding months ending with May preceding.

Timothy seed amounting to 186,740 pounds was exported in May, against 788,892 pounds in May preceding; and during the eleven months ending with May 4,939,237 pounds, valued at \$277,160, were exported, against 10,034,397 pounds, valued at \$444,110, exported during the corresponding months ending with May preceding.

Other seeds aggregating an amount valued at \$16,170 were exported during May, against an amount valued at \$9,583 in May preceding; and during the eleven months ending with May other seeds valued at \$353,377 were exported, against an amount valued at \$478,126 exported during the corresponding months ending with May preceding.

Flaxseed aggregating 301,774 bushels, valued at \$296,444, was imported during May, against 136,887 bushels, valued at \$188,177, in May preceding; and during the eleven months ending with May 3,712,241 bushels, valued at \$4,145,569, was imported, against 417,630 bushels, valued at \$536,898, imported during the corresponding months ending with May preceding.

Other seeds valued at \$68,502 were imported in May, against an amount valued at \$77,384, imported in May preceding; and during the eleven months ending with May other seeds valued at \$1,939,914 were imported, against an amount valued at \$1,630,662 imported during the corresponding months ending with May preceding.

COMMISSION.

There is scarcely a word in the English language that is more often used in the commercial world than the word "commission." We find it in the bill of exchange that passes through our banks, in our insurance transactions and shipping, in fact, in nearly every line of business that can be mentioned. Whether by direct sale or through a broker, the item of commission is to be found either in what is paid direct to the latter for his services or in the expenses entering into the direct transaction. The broker or middleman who works for this commission seems to be a permanent link in the chain of commerce, and as indispensable to its good management as a rudder to a ship.

A writer in the *Agricultural Gazette* of London bitterly assails the practice of selling wheat on margin, and holds that the price of wheat has been to the producers' interests unfavorably influenced by the bulls and bears. This notion, once on this side quite fervid, has lost something of its positiveness.—*Mirror and Farmer*. It always does when wheat goes to 90 cents.

THE EXCHANGES

Chicago Board of Trade memberships are held at \$900.

Tickets of membership to the New York Produce Exchange are held at \$600.

The Chicago Board of Trade recently donated a car of flour to destitute families of Cherokee Strip, Oklahoma.

W. B. Banks has been elected president of the Superior Board of Trade to succeed C. J. Collom, who resigned recently.

Members of the Winnipeg Grain Exchange and the Board of Trade will go on an excursion to inspect the crops throughout Manitoba, July 25-27.

The Chicago Board of Trade is after its members who trade after hours. For that offense two members were recently suspended for a short time as a warning of the Board's wakefulness.

The hay committee appointed by the St. Louis Merchants' Exchange has adopted the rules of the National Hay Association for grading and inspection of hay and straw. The committee will oversee the change and adjust any differences that may arise.

A reform movement has been inaugurated by the new officers of the New York Produce Exchange, and the practice of exacting commissions from porters and scrubwomen and receiving commissions for supplies furnished the Exchange, charged against some of the employes, is receiving attention.

At a recent meeting of the Winnipeg Board of Trade the following committees were elected: Board of Grain Examiners, S. A. McGaw, chairman; J. A. Mitchell, S. Nairn, S. Spink and D. G. McBean. Board of Flour and Meal Examiners, S. Nairn, chairman; R. Muir, S. Spink, F. W. Thompson, C. H. Steele.

Grain men on the New York Produce Exchange allege that the recent government crop report figures leaked out about twenty-four hours before the report itself. Insiders are said to get figures ahead of time so close to the actual condition that they can work on a practically sure basis, while the rank and file of the traders have to wait for the report.

Board of Trade men at Chicago who deal in puts and calls are proposing a joint agreement that, in cases of dispute over these trades, of which the authorities of the Board will take no cognizance, there be a private arbitration. Within a week one prominent concern became involved in two different controversies over privileges, repudiating and making the claim in each instance that it had not been properly notified. The losses accruing in both instances amounted to several hundred dollars. The recurrence of such difficulties is suggesting the necessity of more satisfactory adjudication.

The directory of the Chicago Board of Trade has decided to notify millers throughout the West that there is but one regularly appointed flour inspector, who is under bonds to the Board for the faithful performance of his duty and that all others are acting without authority. The Board thought this move advisable because recently a shipment of several carloads of flour to the Chicago market by an out-of-town miller was passed upon by a self-appointed "flour inspector" and the product pronounced unsound. The miller appealed to Flour Inspector Rathborne, who examined the flour and found it sound in every particular.

At the annual election of officers for the Washington (D. C.) Grain Exchange the retiring president, Mr. Robert B. Tenney, gave a brief history of the Exchange, showing the beneficial results of such an organization. He predicted that soon Washington would have an exchange hall of which the city could feel proud. The election of officers resulted as follows: President, Robert B. Tenney; vice-president, Walter Roberts; secretary and treasurer, E. W. Watkins; Board of Directors, W. E. Mannakee, Theo. I. Mayer, Willie S. Hoge; Board of Arbitration, B. E. Hendrickson, C. S. Taylor, T. A. Long; Board of Appeals, I. W. Brown, D. G. Mohler, H. L. Wilkins.

The annual meeting of the Richmond (Va.) Grain and Stock Exchange was held July 3. Thos. L. Moore is president of the Board of Directors, and Capt. B. A. Jacob was re-elected secretary and treasurer. The officers of the Exchange submitted their reports for the year ending June 30, which showed affairs to be in good condition. The secretary's report showed the membership to be 73, a gain of one for the year, and four having died during the year. The business transacted during the year was reported as follows: Receipts, wheat, 1,581,944 bushels; corn, 731,276 bushels; oats, 576,012 bushels; rye, 13,562 bushels. Total, 2,892,794 bushels—an increase of 130,700 bushels over last year. Flour receipts, 147,802 barrels—a decrease

of 74,091 barrels from last year. In addition the following were offered on 'Change: Meal, 260 bushels; peas, 1,416 bushels; grass seed, 150 bushels, and 240 tons of mill offal. Number of cars of grain inspected during the year, 753—an increase of 247 cars over last year.

S. W. Talmadge, one of the oldest brokers on the Milwaukee Board of Trade, surprised the wheat pit one day by a scathing denunciation of another member, W. W. Yerxa, whom he charged with having beaten him out of \$1,500 by ordering him to buy 50,000 bushels of wheat and failing to put up margins. Mr. Yerxa, it is said, disappeared when wheat broke, but was prevailed upon to return.

The Chicago Board of Trade directors made nineteen houses regular July 1, with a capacity of 28,000,000 bushels, or 6,000,000 bushels less than the regular capacity the preceding year. The houses on which the committee reported adversely were Pacific elevator "B," the Nebraska City Packing Company's two houses, the Alton houses of George A. Seaverns and the Chicago Railway and Terminal Elevator Company's houses, the Galena, Air Line, Fulton and St. Paul. The reasons assigned for dropping them were that there was no necessity for so many elevators, that some of the houses were not up to date and others were used more for private than for public houses.

The St. Louis Merchants' Exchange last year decided to make Kansas hard winter wheat regular on its contracts, the rule to take effect June 1, 1895. There was an effort some years ago to declare the Kansas wheat regular in that market, but it was promptly defeated. Last year at times this quality of wheat got to a premium over No. 2 Red. A few years ago it used to sell at about 5 cents discount; but in 1894, because of the scarcity of hard spring wheat and because so many millers had adjusted their mills for hard grain, there was a great demand for the Kansas. As the state has a very small crop this year it may be that the No. 2 Hard Winter Wheat will keep well up again to the No. 2 Red.

The regular annual meeting of the Pittsburg Grain and Flour Exchange was held June 11. The meeting elected managers for the ensuing year as follows: J. W. Smith, H. L. Houck, Robert Thorne, H. G. Morgan, J. F. Ellwood, J. J. McCaffrey, John A. Moore, G. W. C. Johnson, John A. McCracken, John Hood, S. B. Floyd, S. R. Patterson and W. Henry. The retiring president, John Hood, read his official report giving a retrospective view of the situation and a forecast of the future. The report of the treasurer, S. R. Patterson, showed a handsome balance in the treasury. The report of Superintendent O. C. Alexander showed the following carload receipts in Pittsburg from June 1, 1894, to June 1, 1895: Flour, 3,294; wheat, 2,262; corn, 2,457; oats, 3,775; rye, 1,004; feed, 1,215; hay, 7,949; straw, 450; barley and malt, 800; total, 22,506. The total for 1894 was 22,446. Superintendent Alexander made the surprising statement that the sales on 'Change did not exceed more than 4 per cent. of the receipts.

At the recent annual meeting of the Pittsburg Grain and Flour Exchange President Hood said in his report: "The question of speculating or gambling in grain has been frequently discussed in the commercial and legislative bodies, with the view of regulating or preventing the gross abuse and the widespread evils that have resulted therefrom. Our legislators do not appear to comprehend the difference between those persons who make contracts for delivering merchandise within thirty days after sale and professional gamblers, who never intend to fulfill contracts. The practice of selling grain for May delivery in every month of the year, when it is known that there is no more grain needed in May than in any summer month, demonstrates the gambling features of most of the sales made in commercial exchanges and bucket shops for future delivery. Our Exchange has not dealt much in making sales for May delivery or for any long period, and although those made were bona fide sales, yet I think most of you will agree with me that it would be better for those who have participated in the deals, as well as others, if there was not a sale made on this floor to extend beyond thirty days from date of sale."

Charles Lieberman, of the seed commission firm of Rosenberg & Lieberman, Milwaukee, was recently suspended from membership of the Chamber of Commerce for alleged irregularity in Chamber of Commerce deals. Last fall William Neustetel, a member of one of the principal grain firms in London and Liverpool, bought by cable of Rosenberg & Lieberman a carload of seed, to be shipped to London. The sale was closed, but on the following day Neustetel cabled again to the Milwaukee firm ordering that the shipment be divided up and sent to several points in Europe, directions being given. In the meantime the price of white clover seed had advanced materially and the Milwaukee firm, it is alleged, at once cabled the London dealer that the shipping directions could not be complied with, that the deal was thereby abrogated and other disposition had been made of the carload of seed. Neustetel, in order to prosecute his case against the Milwaukee firm, at once made application for membership in the Milwaukee Chamber of Commerce and was duly elected, although not being there at any time. Then he took the matter before the

Board of Arbitration and won his case against the firm with whom the deal was made. Mr. Lieberman refused to comply with the order of the Board of Arbitration and was therefore suspended until he did so.

OBITUARY

A. M. Knight, grain dealer of Pontiac, Mich., died recently.

E. F. Handy, hay dealer at Wareham, Mass., died recently.

M. Hockwald, dealer in grain and groceries at Calvert, Texas, is dead.

Henry W. Tomlinson, a member of the Baltimore Corn and Flour Exchange, died suddenly of heart trouble June 23.

T. J. Patterson died recently at Moorefield, Ont. He was a member of the firm of Patterson & Colquhoun, grain dealers.

F. M. Townsend, dealer in barley and malt, of New York City, recently died at his home in that city. He was a well-known member of the Produce Exchange.

John Weir, member of New York Produce Exchange, and a shrewd and successful grain merchant, died at his home in Plainfield, N. J., June 29, at the age of 39 years.

Edwin O. Seymour, one of the older members of the Chicago Board of Trade, and for several years past connected with the firm of Irwin, Green & Co. of Chicago, died July 7.

John N. Hubbard, a prominent Chicago broomcorn merchant, died at Evanston, Ill., June 30, at the age of 47 years. Mr. Hubbard was born May 3, 1848, at Brimfield, Mass., a town founded by his ancestors in 1718. He grew up a farmer's boy, attending the district school and graduating from the Brimfield Academy. He then entered Philipps Academy at Andover, from which he also graduated with honor. He came to Chicago as bookkeeper for his cousin, W. L. Hubbard, broomcorn merchant. From 1878 till his death he continued in this business. He was a prominent member of the Chicago Broomcorn Association.

Abner L. Backus, the well-known head of the firm of Abner L. Backus & Co., died at Toledo, Ohio, June 14. Mr. Backus was born at Columbus, Ohio, in June, 1818, and had arrived at the ripe age of 77 years. His family were descended from the Marietta settlers of the state. He went to Toledo in 1863, and in partnership with Samuel M. Young built the Miami Elevator, and embarked with that gentleman in the grain commission and storage business. Later the firm of A. L. Backus & Sons was formed, and the Union Elevator was built by them. Mr. Backus was a public-spirited citizen and a prominent and active member of the Produce Exchange, the members of which passed resolutions of condolence and regret at his death.

OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

H. B. Sparks, Alton, Ill.
A. G. Olds, Monterey, Mexico.
Dr. Joseph Creutner, Budapest, Hungary.
H. Kurtz of H. Kurtz & Son, Mansfield, Ill.
S. E. Kurtz of H. Kurtz & Son, Mansfield, Ill.
Louis Markoczy, engineer, Budapest, Hungary.
W. P. Murphy of Packham & Murphy, Frankfort, S. D.
H. Hamper, representing the S. Howes Company, Silver Creek, N. Y.



IF IT ISN'T ONE THING, IT'S TWO THINGS.
—Zahm's Circular.

WATERWAYS

The shipments of grain from Buffalo via the Erie Canal during June were the smallest since 1886.

One day in the last week in June about 30,000 bushels of grain were engaged in New York for Hamburg for the lump sum of 25 shillings.

The total registered tonnage passing through St. Mary's Falls Canal during June was 2,637,636 tons, against 2,119,731 tons in June, 1894.

Work is soon to begin on the construction of a canal connecting Puget Sound and Lake Washington, near Seattle. It will be three miles long and will cost about \$6,000,000.

The Congressional friends of the Nicaragua Canal expect the government commission, which will return to the United States this month, will report favorably on the project of completing the waterway.

The Canadian government will soon appoint three commissioners to cooperate with the American Commission in an investigation of the deep waterways project from the great lakes to the Atlantic Ocean.

On June 11 109 vessels passed through the St. Mary's Falls Canal in 24 hours, 107 having been the highest previous record for the same time. The daily average of vessels passing the locks during June was about 95.

The Executive Board of the International Deep Waterways Association met in Chicago, June 25, to perfect arrangements and prepare a programme for the next international convention, to be held at Toronto next September.

The Red River has risen recently on account of rains, and navigation is made much easier. A steamer recently transported 7,000 bushels of wheat from 80 miles above Grand Rapids, N. D., for the Minnesota and Northern Elevator Company.

After a desuetude of eleven months and seven days a charter for the loading of a full cargo of grain at Baltimore, Md., has been consummated. But it was at the unremunerative rate of 38 cents per quarter for Copenhagen and Aarhus, in the Danish Sound.

Canada's new canal around the rapids of the St. Mary's River is 3,500 feet long, 152 feet wide at the top, with a bottom width of 145 feet, and will allow a passage of boats drawing 20 feet of water. Vesselmen expect that at the end of 10 years a depth of 23 feet will be necessary.

Germany has a total of 7,366 miles of canals. Within the last 10 years 60 miles of canals have been constructed at a total estimated cost of \$3,061,800. There are at present in course of construction 230 miles of canals at a total estimated cost of \$27,706,800, and there are 300 miles of canals projected.

Canal men expect to carry on an active campaign at the next election in New York, to obtain a favorable vote on the question of bonding the state for \$9,000,000 to make needed improvements of the Erie Canal. Efforts will be made to get resolutions in the platforms of the two political parties next fall.

The annual statement of the navigation and shipping of the United Kingdom during 1894 shows that 388,847 vessels entered, having a tonnage of 94,387,371, and 354,891 vessels cleared, having a tonnage of 88,497,509. This gives an aggregate tonnage of 182,000,000 tons, and shows an advance of over 10,000,000 as compared with 1893.

The Montreal *Trade Bulletin* states that a steamship agent informs it that unless business improved soon he would have to withdraw some of his steamers running to and from Montreal, and that he never remembers the grain shipping trade being as dull and lifeless as it is at present. Compared with former seasons, he says he is doing almost nothing.

Up to the end of the first week in June 100 grain cargoes had left Portland, Ore., this season. In the same time 120 cargoes left the port of San Francisco, which in former years used to have 75 to 100 more vessels than Portland. Shipping men say that this growth of Portland's shipping is due to the less expense of loading in a freshwater port.

A recent official compilation of freight rates on the lakes from 1887 to 1894, inclusive, shows that all freights, with the single exception of building stone, have decreased at a big ratio since the first named season. In all but three or four cases the decrease has been over 50 per cent., and in one or two has been 75 to 80 per cent. Wheat, for instance, dropped from 7 cents in 1887 to 2½ cents in 1894.

The year 1895 will undoubtedly be remembered as a great year for canals. Germany's Kiel Canal, which cost over \$38,000,000; the Harlem Canal, which cost \$2,500,000; the Canadian Sault, which cost \$4,000,000, have been opened. This does not complete the list, as the fate of the Nicaragua and Panama Canals is yet to be settled, and the deep waterway connecting

the great lakes with the Atlantic Ocean is receiving attention. Perhaps the most fortunate of all, at least in this country, will be the record of the number of schemes which exploded in their incipency. And is it not remarkable that for at least three months not one new canal has been proposed?

The Harlem Ship Canal, which connects the Hudson River with Long Island Sound, was formally opened June 17. The waterway is not for large vessels, and is chiefly intended to afford a passageway for the canal boats and lighter traffic. The canal was first projected in 1874, but nothing was done till April, 1893, when dredging commenced. It is 6 miles long, 9 feet deep, 50 feet wide, and cost \$2,500,000.

The latest engineering and ship-canal idea is to dispense with the twenty-four locks in the Welland Canal leading from Lake Erie to Lake Ontario, and to make the whole drop of 326 feet between these two lakes in two pneumatic balance locks, built of steel, operated by compressed air, and large enough to admit vessels of ocean draught. The greatest now in existence is on the Manchester ship canal, 45 feet high.

W. G. Thompson, the superintendent engineer of the new Canadian Sault Canal, has reported that the waterway is utterly useless for the purpose for which it was built, that a great deal of the cribwork and walls was defective, and that to derive full benefit from the canal the channel would have to be deepened between Lakes Superior and Huron and the harbors of Port Arthur and Owen Sound. The completion of this work would cost \$1,600,000.

It is reported at Buffalo that grain shortages have been numerous from Chicago of late. The Robert Mills was short 206 bushels and the City of Rome 443 bushels of oats. They unloaded at the Coatesworth Elevator. Other vessels at the same elevator have also been short. Besides this, canalmen claim that on arriving at New York they are finding their loads which were loaded at the Coatesworth Elevator also short. Among boats which have suffered lately at this elevator are the Livingstone and Lockwood.

A convention in Minneapolis June 25, which was called for the purpose of taking steps toward having the Mississippi River made navigable above Minneapolis, adopted resolutions asking Congress to take such action as will lead to an immediate survey and a report as to the practicability, cost and utility of opening and maintaining a channel for steamboats. It is said that the river offers no serious engineering difficulties in the way of improvement except the dozen or so of falls and rapids between Minneapolis and St. Cloud.

As the date for the opening of the Chicago Drainage Canal draws nearer, speculation as to the results on lake levels is increasing among shipping men at lake ports. One of the latest moves to investigate is the decision of the Richelieu and Ontario Navigation Company, which controls the St. Lawrence River steamer service, to memorialize the Canadian government to urge the appointment of an international commissioner to consider whether the water in the lakes and the St. Lawrence will not be lowered and navigation rendered dangerous.

Chas. H. Keep, secretary of the Lake Carriers' Association, has estimated that a lowering of the lake levels by three inches would diminish the carrying capacity of the lake fleet 1,142,370 tons and reduce its earnings \$571,185; that a lowering of six inches would cut the capacity 2,284,740 tons and diminish earnings \$1,142,370, and a lowering of nine inches would affect the capacity to the extent of 3,427,110 tons and wipe out \$1,713,555 in earnings. The earnings of lake vessels are estimated at 50 cents per ton of cargo carried, over and above cost of loading and unloading.

Regarding the necessity of improving the New York canals, the Washington *Post* says: It will be a long time—probably ten years—before the proposed work will be completed. Meanwhile "the dwindling commerce of the port of New York" will continue to dwindle. And when the canals are deepened they will not enable New York to compete successfully with Newport News, Va. This new rival is more to be feared than Boston, Philadelphia or Baltimore, because of her superior natural advantages. The produce of the Northwest will continue to find its way in increasing quantities to the new city on Hampton Roads because of the shortness of the route and unsurpassed facilities for handling freights. The best harbor on the Atlantic Coast is another and great advantage which Newport News possesses, and which will be a great factor in her inevitably great future.

It is computed that to bring 25 bushels of wheat into any near-by city over ten miles of ordinary good dirt road costs as much as it does to take those same 25 bushels 4,000 miles to Liverpool. What, then, must be the cost of transportation which would be saved by good highways in any state?

It's an ill wind that blows nobody any good, and it is characteristically American to utilize the power stored up in a cyclone, as farmers are said to be doing in Western cyclone regions. They get 100-horse power out of a 15-mile wind by means of a large wheel similar to a paddle wheel, and some say they are going to make farming profitable throughout the whole arid regions.

LATE PATENTS

Issued on May 28, 1895.

BALING PRESS.—Charles D. Neeb, Ann Arbor, Mich. No. 540,183. Serial No. 520,125. Filed Aug. 13, 1894.

GAS OR GASOLINE ENGINE.—Gilson W. Roth, Richards, Ind. No. 539,923. Serial No. 513,373. Filed June 4, 1894.

GRAIN ELEVATOR AND WEIGHER.—Bjorn E. Haughen, Hillsboro, N. D. No. 540,052. Serial No. 529,128. Filed Nov. 17, 1894.

MALT TURNING AND STIRRING MACHINE.—John F. Dornfeld, Chicago, Ill. No. 539,860. Serial No. 522,060. Filed Sept. 4, 1894.

Issued on June 4, 1895.

BALING PRESS.—Daniel K. West, London, England. No. 540,472. Serial No. 457,658. Filed Jan. 7, 1893. Patented in England Oct. 27, 1891. No. 18,476.

GAS ENGINE.—Alexander R. Holmes, New York, N. Y., assignor of one-half to Harry E. Wood, same place. No. 540,490. Serial No. 541,557. Filed March 13, 1895.

Issued on June 11, 1895.

BALING PRESS.—Magnus P. Elgen, St. Paul, Minn., assignor of sixty-one one-hundredths to August Johnson and Elias Cronstedt, same place. No. 540,652. Serial No. 525,333. Filed Oct. 9, 1894.

BALING PRESS.—Marvin Mead, Monte Vista, Colo. No. 541,050. Serial No. 536,402. Filed Jan. 28, 1895.

GRAIN DOOR FOR CARS.—Edwin A. Burrage, Minneapolis, Minn. No. 540,851. Serial No. 523,550. Filed Sept. 20, 1894.

GAS ENGINE.—Charles M. Rhodes, Wayne, Pa. No. 540,923. Serial No. 529,724. Filed Nov. 23, 1894.

GRAIN SEPARATOR.—Erastus E. Mendenhall, Thomasville, N. C., assignor of one-fourth to Julian E. Sumner, same place. No. 541,051. Serial No. 522,164. Filed Sept. 5, 1894.

PEA HULLER.—Albert W. Armstrong, Columbus, Neb. No. 540,774. Serial No. 539,390. Filed Feb. 23, 1895.

VAPOR ENGINE.—Frank W. Ofeldt, Jersey City, N. J., assignor to the Marine Vapor Engine Company, same place. No. 540,757. Serial No. 453,821. Filed Jan. 18, 1893.

Issued on June 18, 1895.

BALING PRESS.—Winfield S. Livengood and Arthur J. Mason, Kansas City, Mo., assignors to the Devoe-Livengood Manufacturing Company, same place. No. 541,370. Serial No. 482,183. Filed Aug. 2, 1893.

BEAN SCOURER AND CLEANER.—John Skinner, Flint, assignor of one-half to Henry Putnam, Goodrich, Mich. No. 541,185. Serial No. 521,896. Filed Sept. 1, 1894.

COFFEE HULLER.—Joseph Reimers, Buffalo, N. Y., assignor to Fred C. M. Lantz, same place. No. 541,250. Serial No. 545,133. Filed April 10, 1895.

CONVEYOR.—John McIntyre, Jersey City, N. J., and Henry A. Kessel, Brooklyn, N. Y. No. 541,112. Serial No. 494,642. Filed Dec. 26, 1893.

GRAIN SCOURER.—William W. Huntley, Silver Creek, N. Y., assignor, by mesne assignments, to the Huntley Manufacturing Company, same place. No. 541,235. Serial No. 450,320. Filed Oct. 29, 1892.

Issued on June 25, 1895.

GAS ENGINE.—Frank S. Mead, Montreal, Canada. No. 541,773. Serial No. 497,147. Filed Jan. 17, 1894.

CENTRIFUGAL GRAIN AND STRAW SEPARATOR.—Lynne W. Macomber, Battle Creek, Mich., assignor to the Advance Thresher Company, same place. No. 541,769. Serial No. 543,891. Filed March 30, 1895.

D. E. Murphy and Thomas Mitchell have been bound over to the grand jury at La Moure, N. D., charged with stealing 4,800 bushels of wheat from the Monarch Elevator Company.

A principal who seeks to avail himself of a contract made by another for him, whether by an appointed or self-constituted agent, is bound by the representations made and methods employed by the agent to effect the contract.

Two cars of new rye were received at Chicago July 8. Both graded No. 3. In one case the berry was of good size, in the other it was small. In each case the grain, as is customary with the first rye, was a little soft. The first new rye last year was received July 14, graded No. 3, and sold at 43 cents.

Latest Decisions.

Requests for Cars.

The law implies an agreement to furnish necessary cars on a particular day, the Court of Appeals of Kentucky holds (Newport, Etc. Co. vs. Mercer, Ky., Jan., '95, 29 S. W. 301) when a shipper has made a request therefor, in due time, of a station agent, who, for that purpose, will be considered as having the authority of a general agent, though a railway company is not generally held to more than reasonable diligence and care in furnishing cars for transportation of freight. —*Business Law.*

Possession Passes With the Bill of Lading.

The Kansas City Court of Appeals handed down an opinion recently in the case of A. Dymock against the Midland National Bank, which grew out of the failure of the Currier Commission Company and its transactions with the bank. The commission company used to borrow money on bills of lading and cars of grain bought in Kansas. The Jackson County Circuit Court held that the surrender of a bill of lading was surrender of possession of the car. The appellate court affirmed the judgment of the lower court.

Tariff and Not Bill of Lading Governs.

The bill of lading is ignored and the published tariff rate made binding by the interstate commerce act, as the Supreme Court of the United States views it. Not only so, but it holds (Gulf, etc. Co. vs. Hefey, U. S., April, '95, 15 S. C. 802) invalid, so far as interstate shipments are concerned, a state statute, such as one of Texas, imposing a penalty for a failure to deliver goods on tender of the rate named in a bill of lading. It does not make any difference that the bill of lading names the correct tariff rate, the penalty of the state law cannot be enforced.

Lien of Factors for Advances.

No express agreement is necessary to give a factor or commission merchant a lien upon the goods in his hands for advances and expenditures made by him in the business of his agency, or connected with the goods consigned to him. The lien arises from an agreement which the law implies. So the Supreme Court of Minnesota, which further holds (Haebler vs. Luttgen, 63 N. W. Rep. 720) that although the contract between the factor and his principal is in writing, and contains no express agreement to that effect, he is, nevertheless, entitled to a lien, provided the written contract contains no special agreement inconsistent with the existence of such lien.

Lien of Carrier in Cases of Several Consignments.

Where the same vender, under a single contract of sale, ships by rail several consignments of goods to the same purchaser, each shipment embracing several carloads, the Supreme Court of Georgia holds (Pennsylvania S. Co. vs. Georgia R. & B. Co., 21 S. E. Rep. 577), the carrier has the same right to retain out of any one or more of the consignments enough of the goods in value to pay the charges for freight and storage upon all, without respect to the particular consignments out of which the goods are retained. And this right of the carrier has the same relation to the right of stoppage in transitu by the vender which it has to the right of the consignee to claim delivery of the retained goods.

Assignability of Agreements Not to Engage in Business.

The courts will enforce a reasonable agreement by the seller of a business not to engage therein again at that place for a certain length of time. Such an agreement is a valuable right in connection with the business it is designed to protect, and, going with the business, the Court of Appeals of New York holds (Francisco vs. Smith, 38 N. E. 980) it may be assigned, and the assignee may enforce it just as the assignor could have enforced it if he had retained the business. The agreement can have no independent existence or vitality aside from the business. But the purchaser will not lose the benefit of the agreement by omitting for any definite time during the specified period to carry on the business. The agreement will stand for his protection whenever during that time he resumes or enters upon the business.

Warehousemen—Contract—Stipulation.

The Kentucky Court of Appeals held, in the recent case of Emerson et al. vs. Walker et al., that where the appellees, as tobacco warehousemen, advanced money to appellant with which to purchase and ship tobacco to them for sale, under an agreement by which appellees were to reimburse themselves out of the proceeds of sale, in an action involving a settlement of their accounts, the court below erred in ignoring a claim for damages asserted by appellants on account of the violation by appellees of a stipulation in the contract by which appellees agreed not to sell any tobacco without special instruction from appellants as

to the time of sale, the allegations of an amended petition by which this claim was asserted in apt and appropriate terms not being controverted, and the allegations of value which must be proved, though not controverted, being sustained by the evidence.

Delivery of Grain.

Van Valkenburg & Son vs. Gregg. Error from Lancaster county. Reversed and remanded. Opinion by Commissioner Irvine.

A vender of goods cannot recover damages on account of the refusal of the vendee to accept unless he tenders delivery of the goods in accordance with the contract.

Where a written contract specifies a place of delivery delivery must be tendered at that place, and ambiguities in such written contract are to be solved in the same manner as ambiguities in other writings.

The shipment by a vender at A of goods consigned to himself at B, the vender making a draft for the price and attaching the bill of lading thereto is a tender of delivery at the point to which the goods are shipped and not at the place of shipment.

A contract for the sale of goods was substantially as follows: "Bought of M. G. five (5) cars new shelled corn, track Ohioa or Tobias, at forty-five (45) cents per bushel, his weights, billing of same to be given by Dec. 10, 1890.

Signed:

"V. & SON."

Held, that this was a contract for delivery at Ohioa or Tobias. The vender to ship from either of those points to the vendee at a point designated by him, and that compliance with such contract was not proved by showing a shipment from one of those points designated by vendee, the goods being consigned to the vender.

The fact that the vendee had received a portion of the goods consigned to the vender at the point designated was a waiver only of the terms of delivery as to the goods so received, and did not waive delivery of the remaining goods according to the contract. —*Journal, Lincoln, Neb.*

WANT THE ELEVATOR COMBINE BROUGHT TO TIME.

The canal boatmen held a meeting in Buffalo, July 5. The meeting was called for the purpose of urging the enforcement of the state law, which fixes elevator charges at $\frac{1}{2}$ of a cent in and out. It is claimed that $\frac{1}{2}$ of a cent is now being charged under the guise of "storage." The charges now made against canal cargoes by elevators are "elevating and storage $\frac{1}{2}$ of a cent." It is claimed that the storage proviso in the charges is but a trick to raise the transfer rate, as storage is charged on grain that is in the elevators but a few hours or even a few minutes, when the cargoes go through a practically evict transfer.

The resolutions which were adopted are as follows: *Resolved*, That we, canal forwarders and Erie Canal boatmen, partners of the state in the transportation business, implore Gov. Morton and the Attorney-General to compel the Buffalo railroad grain elevator combine to comply with the state's grain elevator law, as the sums illegally collected by the said elevator combine for elevating canal grain amount to \$64 on a pair of canal boats loaded with wheat, \$70 on corn and \$120 on oats.

Resolved, That it is this robbery on canal commerce that has forced nearly all the boatmen to tie up all their boats, while the railroads carry out of Buffalo daily from 400,000 to 800,000 bushels of grain; and be it further

Resolved, That we earnestly appeal to the press and to all the friends of the Erie Canal to aid the movement to compel said elevator combine to elevate canal grain at the rate fixed by the statute.

Resolved, That the Secretary be instructed to forward a copy of these resolutions to Gov. Morton, also to the Attorney-General.

A farmer near Easton, Md., has oats 56 inches in height.

Although this has not been a drouth year many acres of grain have been burned, the fire starting from the usual causes—carelessness, locomotive sparks and thrashers. In one fire in California 9,000 acres of hay and grain were destroyed.

The chinch bug is going. Chancellor Snow of the Kansas State University reports that the demand for his infected bugs is so great that he cannot supply enough. When the infected bugs are scattered in a field they kill their lusty brethren by the million. Lately Chancellor Snow has been sending out about 1,000 boxes of the bugs a week.

Farmers in the vicinity of Louisville, Ill., report the appearance in the timothy meadows of a new pest, which they say is threatening to do great damage. There first appears upon the head of the timothy stalk a dark brown comb about the size of a large pea. From this comb emerges a bug similar in shape to a Colorado potato bug, with long feelers and a large mouth. This bug cleans up everything green in its path. A few bugs have been sent to the State Entomologist for his inspection.

THE MARKETS.

We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.

GRAIN REPORT OF SHANKS, PHILLIPS & Co., Memphis, Tenn., July 12.—The downward course of the grain markets for some weeks past has had a very depressing effect on trade, and the volume of business has been light. Buyers seem to have been expecting lower prices on all products and have been carrying light stocks, which have been ample, however, to supply all demands. WHEAT.—There is practically none here. The lit-on hand is held by the mills to mix with new wheat, which is coming in very slowly on account of continued rains, which prevent thrashing. New No. 2 Wheat to-day 66 cents. CORN.—The continued decline has had a tendency to check receipts, which, however, been ample for all requirements. The local mills have been running short time and needing little. Shipping demand has amounted to nothing. No. 2 White 42, Mixed 40 cents. OATS.—In anticipation of offerings of new crop, have been weak and have ruled dull and lower. No. 2 White 30 cents, No. 2 Mixed 26 $\frac{1}{2}$ @27 cents. BRAN.—Dull and lower, selling down to \$12.50. To-day firmer and in demand at \$13.00. HAY.—Receipts have been light, though sufficient to supply the trade wants. The market is firm and with anticipated damage to new crop, old hay is likely to prove good property. Choice Timothy \$14.00@14.50, No. 1 \$13.25@13.50, No. 2 \$12.00, Clover Mixed about 50 cents per ton less. All new hay will likely be largely clover mixed. Arkansas Prairie very dull. Choice \$5.75. FLOUR.—Dull. Patent \$3.50, Straight \$3.35 for old wheat. MEAL.—\$1.95@2.00

CHICAGO ELEVATORS MADE "REGULAR."

The directors of the Chicago Board of Trade at a special meeting, June 27, dropped out of the list of "regular" grain elevators seven large houses with a capacity of 7,750,000 bushels of grain. Both the Seaverns warehouses, on the Alton road, were dropped; Harper's house, on the St. Paul, and five of the warehouses belonging to the English syndicate. All the other establishments with a capacity of about 27,750,000 bushels were made regular, according to their application, and their bonds approved.

The warehouses whose licenses were renewed by the Board of Trade officials were as follows:

Elevator.	Capacity, bushels.
Santa Fe Elevator A.....	1,500,000
Rock Island A.....	1,100,000
South Chicago C.....	1,500,000
Rock Island B.....	800,000
Indiana and Wabash.....	3,000,000
Chicago and St. Louis.....	1,000,000
Chicago and St. Louis annex.....	1,000,000
Armour A.....	1,250,000
Armour B.....	1,250,000
Armour B annex.....	3,000,000
Armour E.....	1,250,000
Armour F.....	800,000
Armour D and annex.....	3,000,000
City.....	1,000,000
Iowa.....	1,500,000
Union.....	2,000,000
Central A.....	1,000,000
Central B and annex.....	1,800,000
Total.....	27,750,000

LOCATIONS FOR FACTORIES.

The name of the Chicago, Milwaukee & St. Paul Railway has long been identified with practical measures for the general upbuilding of its territory and the promotion of its commerce, hence manufacturers have an assurance that they will find themselves at home on the company's lines.

The Chicago, Milwaukee & St. Paul Railway Company owns and operates 6,150 miles (9,900 kilometers) of railway, exclusive of second track, connecting track or sidings. The eight states traversed by the lines of the company, Illinois, Wisconsin, Northern Michigan, Iowa, Missouri, Minnesota, South Dakota and North Dakota, possess, in addition to the advantages of raw material and proximity to markets, that which is the prime factor in the industrial success of a territory—a people who form one live and thriving community of business men, in whose midst it is safe and profitable to settle. Many towns on the line are prepared to treat very favorably with manufacturers who would locate in their vicinity.

Mines of coal, iron, copper, lead and zinc, forests of soft and hard wood, quarries, clays of all kinds, tanbark, flax and other raw materials exist in its territory in addition to the vast agricultural resources.

A number of new factories have been induced to locate—largely through the instrumentality of this company—at towns on its lines. The central position of the states traversed by the Chicago, Milwaukee & St. Paul Railway makes it possible to command all the markets of the United States. The trend of manufacturing is westward. Nothing should be permitted to delay enterprising manufacturers from investigating. Confidential inquiries are treated as such. The information furnished a particular industry is reliable. Address

LUIS JACKSON,
Industrial Commissioner, C., M. & St. P. R'y,
425 Old Colony Building, Chicago, Ill.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

MAN WANTED TO TAKE CHARGE OF ELEVATOR.

We want a man to take charge of country elevator. Must understand handling and loading grain and taking care of live stock; must know something about carpenter work and be strictly sober. Steady employment to right man. Salary \$40 per month. Address

ALLERTON & HERRON, Allerton, Ill.

SITUATION AS BUYER WANTED.

Having had 20 years' experience buying, selling and handling all kinds of grain, as well as managing a cleaning and mixing house, and being desirous of advancing in the work, I make application for a position in a first-class house. I prefer a place where there are good church and school privileges. Can give good references. Correspondence solicited. Address

W. L. CALLISON, Hartland, Wis.

RUDY'S PILE SUPPOSITORY

Is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and free sample to MARTIN RUDY, Registered Pharmacist, Lancaster, Pa. No POSTALS ANSWERED. For sale by all first-class druggists everywhere. Peter Van Schaack & Sons, Robert Stevenson & Co., Morrison, Plummer & Co., and Lord, Owen & Co., wholesale agents, Chicago, Ill.

DAVIS' GRAIN TABLES.

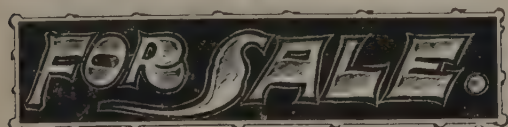
The value of wheat or any grain at 60 pounds to the bushel, for any amount less than 100 bushels is shown without addition or multiplication, and for any amount over 100 and under 1,000 bushels, with but a single addition; at any price from 25 cents to \$1.25 per bushel. The value of bushels and pounds of other grain also is shown at 56, 48 and 32 pounds to the bushel at any price from 15 cents to \$1.50 per bushel. Price, postpaid, \$1.25. Address

E. D. DAVIS, 610 Nicollet Ave., Minneapolis, Minn.

PARTNER WANTED TO START BRANCH FACTORY.

Wanted—Firm building machinery to coöperate and start a branch factory to manufacture gasoline engines. I own large plant equipped with machine tools and fixtures and 50-horse power water power, all worth \$20,000. A working capital of \$12,500 secures one-half interest. Good per cent. on investment. Have business started with engines built and running. Established firm preferred, or will accept an active or silent partner. Address

H. E. H., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

CLIPPER AND DUST COLLECTOR.

One No. 4 Eureka Oat Clipper and one Cyclone Dust Collector for sale. Both in good condition. Address

J. D. WHITE, Stillman Valley, Ill.

ENGINE CHEAP.

One second-hand 300-horse power engine for sale cheap. Address

SIMPSON & ROBINSON COMPANY, 71-72 Commerce Building, Chicago, Ill.

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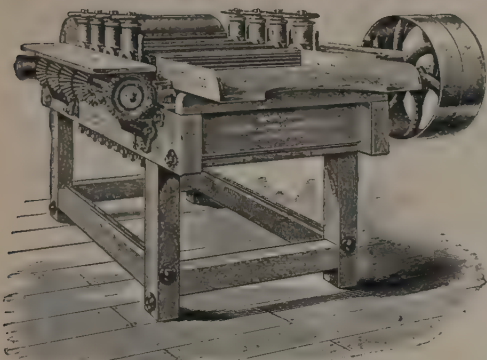


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This is an entirely new and complete system for handling, treating and storing grain, seeds, millstuff, coal, sand, gravel, salt and other subdivided substances which can be handled in bulk, and the protection and preservation of cereals, seeds, vegetables, fruits, ensilage and fodder crops, cotton, wool and other fibers, tobacco, provisions and all perishable substances and valuable commodities in absolute safety from fire, water, air, storms, floods, microbes, insects, vermin, animals, thieves, evaporation, fermentation, oxidation or other causes of damage or destruction.

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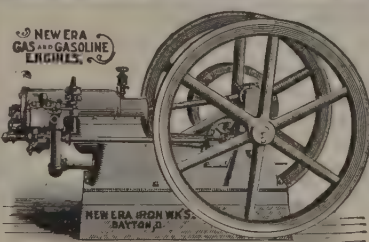
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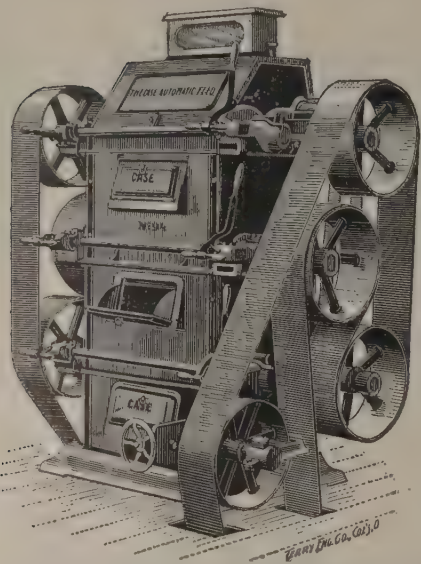
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She is a daisy. We have smiles all over our faces like a full moon. Now, if you want a statement regarding the roll, let me know, and will write you a good one. Everything all O. K. Yours respectfully,

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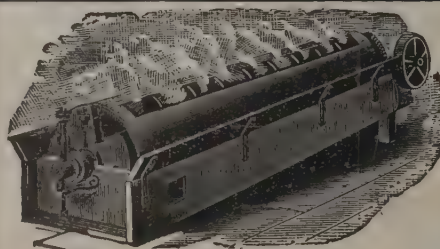
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WRITE US FOR PRICES BEFORE BUYING.

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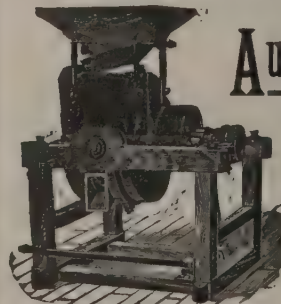


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Drying Cylinder made entirely of Iron. The machine has few parts and is not liable to get out of order. Automatic in its operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

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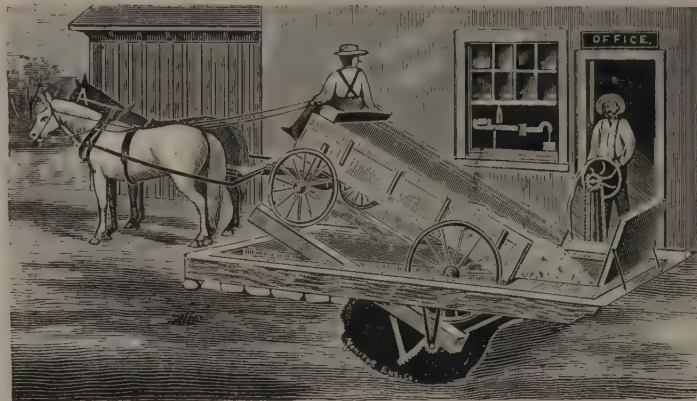
The adjustment is positive and automatic, utilizing every part of the grinding surfaces. Can be started or stopped at pleasure, without stopping the power. Is dressed without taking the shaft out of its boxes, or the belt off the pulley.

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PATENT WAGON DUMP

The only dump made that is always under the complete control of operator.

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GENTLEMEN:—Yours of the 22d is received and in reply to same would say that with the Dumps we have bought from you and those we have bought in houses since, we have eight sets in all and do not want any other kind. They have given us entire satisfaction either on or off the scales. Respectfully yours,

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GENTLEMEN:—I have used your Dump for the past two years at this place and must say, as every farmer does, that it is the best and easiest handled Dump of any they ever saw, and has drawn enough extra trade to pay for itself since I have had it. Yours truly,

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FAIRBANKS, MORSE & CO., St. Paul, Minn., Northwestern Agents.

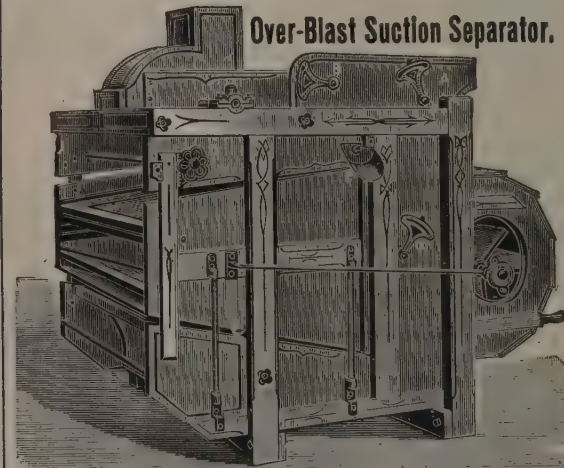
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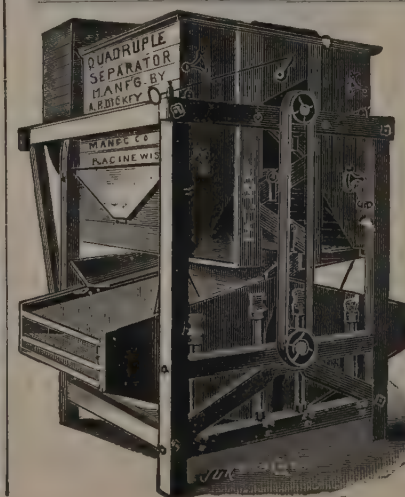
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STANDARD
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"Grain
Cleaned
to a
Standstill."



Manufactured in any desired size and pattern, with capacities to accommodate the largest Elevator and Flouring Mills, or small Warehouses for hand use. Single and Double, End and Side Shake, and Dustless Separators, both Under and Over-Blast.



The Quadruple Suction Dustless Separator. Four separate suctions, independent of each other with sieves and screens, requiring less power, less floor space, lower in height, needing less bracing, has better and more perfect separations, and furnishes with the only perfect force feed and mixer on the market. Guaranteed to clean Grain to any desired standard without waste once through this machine twice as well as any machine made.

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The Incline Elevator and Dump.

Patented April 3, 1894.

It is **THE NEW WAY** of elevating ear corn, shelled grain or minerals into car or storage bin.

Its cost is so small that it is practical for farm use.

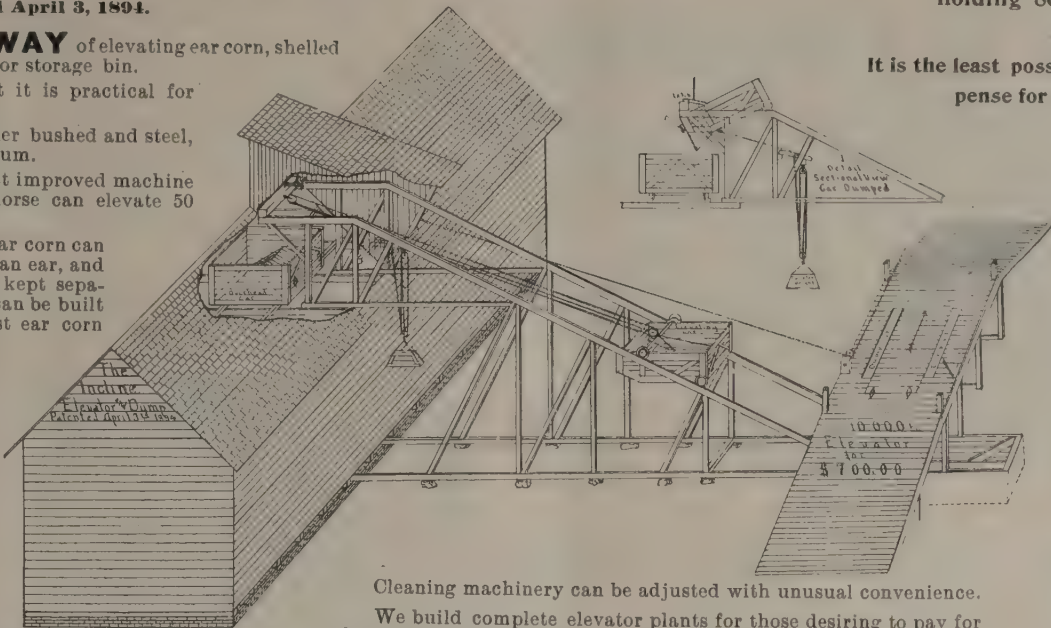
Its pulley blocks are roller bushed and steel, reducing friction to a minimum.

The leverage of our latest improved machine is such that a good 1000-lb. horse can elevate 50 bushels of shelled corn.

With it, 100,000 bushels ear corn can be cribbed without scooping an ear, and the different grades may be kept separate; and the storage, which can be built at a reduced cost, is the best ear corn storage, besides having a combination feature.

It will elevate more grain than 8 average threshers will thresh or shellers shell, and the power for doing it costs nothing, because the team that brings the load elevates it, although the dealer can furnish the power with engine or otherwise if he desires.

With our overhead car system of conveying, storage can be constructed at as small a cost as with a drag belt and yet every other load elevated may be a different grade or kind of grain and may be placed in separate bins without mixing or lessening the speed of elevating.



Cleaning machinery can be adjusted with unusual convenience.

We build complete elevator plants for those desiring to pay for them on the installment plan. The monthly reduction in the cost of power as compared with a steam plant is sufficient to pay for one of our plants in six years.

\$2,000 will complete a 64,000-bushel Elevator, having 21 shipping bins holding 800 bushels each.

It is the least possible investment and expense for the best results.

A NEW plan of chute, leading from shipping bin to railroad car, is used, through which either ear corn or shelled grain will pass equally well. The overhead car having a capacity of 100 bushels can be completely filled without moving.

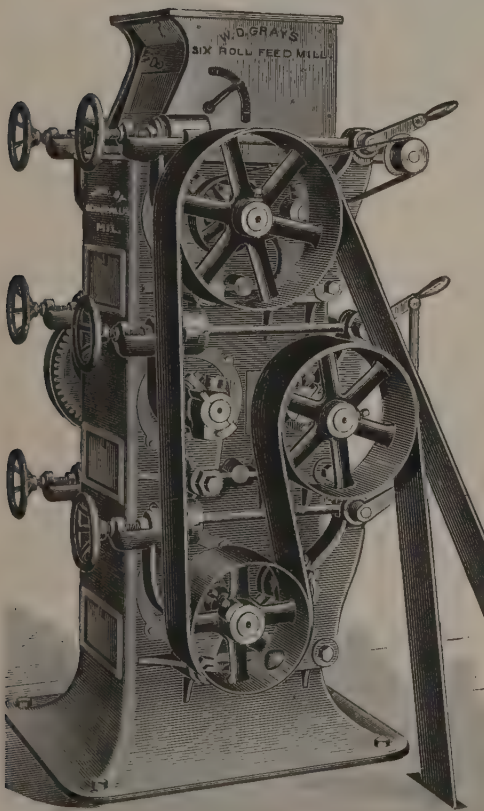
A safety ratchet holds every inch elevated and prevents a crash should a break occur; and the teamster can unfasten rope without getting out of his wagon.

Our new Ventilated and Combination Grain Bin was patented Jan. 15, 1895.

Manufactured by H. KURTZ & SON, Mansfield, Ill.

HUNDREDS OF MILLERS

USE A FEED MILL LIKE THIS, AND THIS IS WHAT THEY THINK OF IT:



"We got fooled once in buying a cheap, light Feed Mill, but since we got the Allis Feed Roll we are happy once more."

"Your Feed Mill grinds sixty-five bushels of fine meal per hour with fifteen-horse power."

"The farmers now say, 'Grind it a little coarser this time.' With my old feed mill I could never grind fine enough to suit them."

"We ground a car of 650 bushels, sacked it, and put it back in car, all in five hours."

"Our new Allis Feed Mill is paying for itself at the rate of \$4 per hour."

"I astonish the farmers with my Allis Feed Mill, for as soon as their corn is unloaded it is ground and ready to load back in their wagon."

"We advise any man wanting a Feed Mill to buy the Allis make."

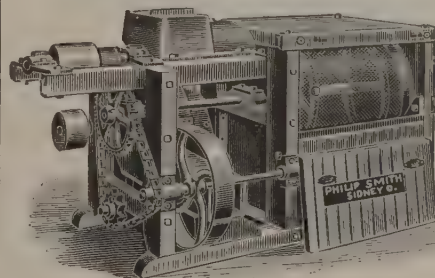
"I have run several different makes of Feed Mills, but none grinds so fast and so fine, and gives so little trouble as the Allis."

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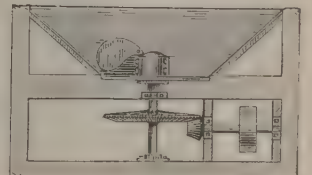
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The Miami Valley Corn Sheller.

The latest improved revolving screen mill Sheller, for mills, warehouses and portable purposes.



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WASTES NO GRAIN.
REDUCES FIRE RISK.



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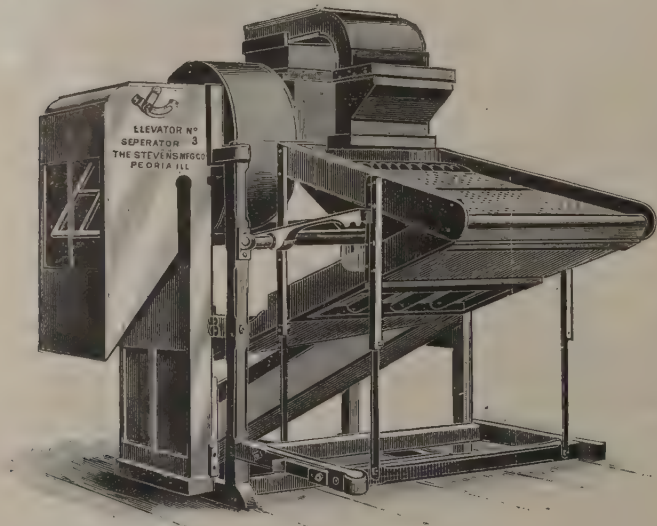


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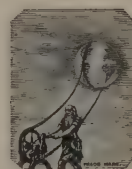
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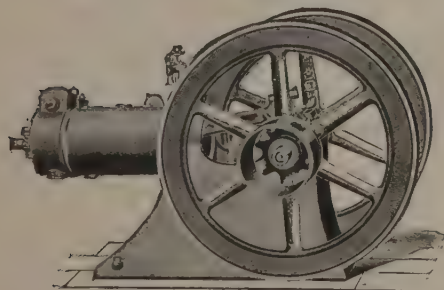
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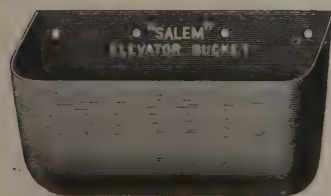


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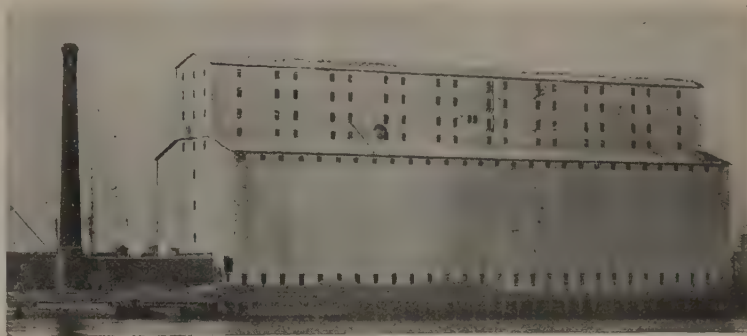
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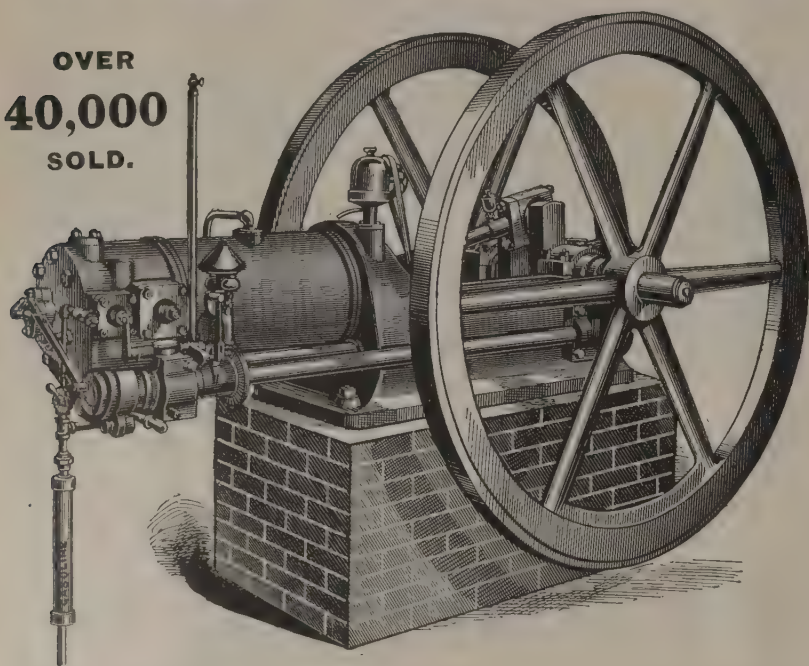


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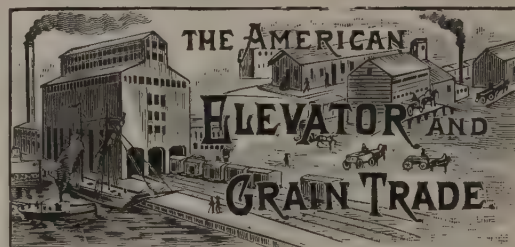
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\$ 100,000.

Minneapolis, Minn. May 23 1895

The S. Howes Co

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Gentlemen

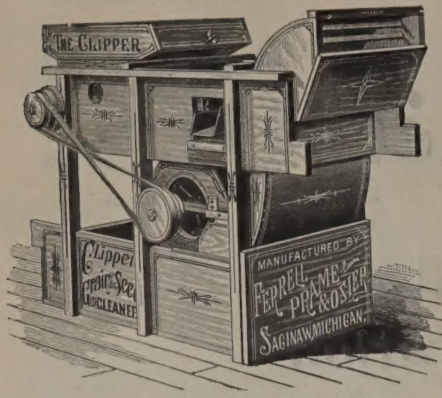
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can truly say that they give entire satisfaction
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Victoria Elevator Co.

By A. E. Benedict, Treas.

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THE S. HOWES COMPANY, - - SILVER CREEK, N. Y.

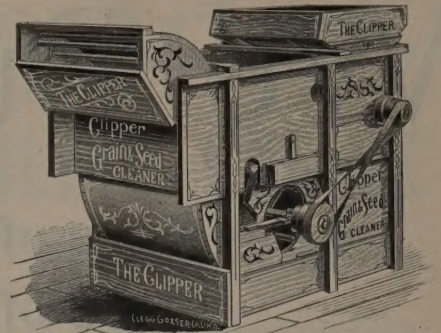


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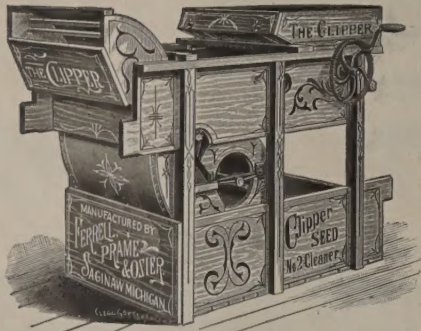
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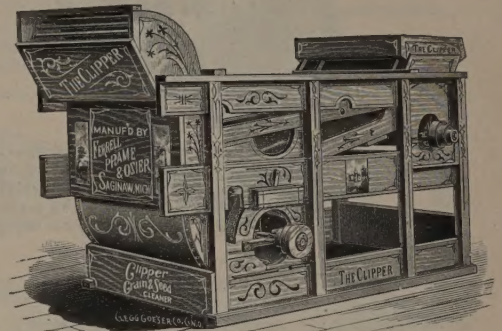
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Work are Unsurpassed.

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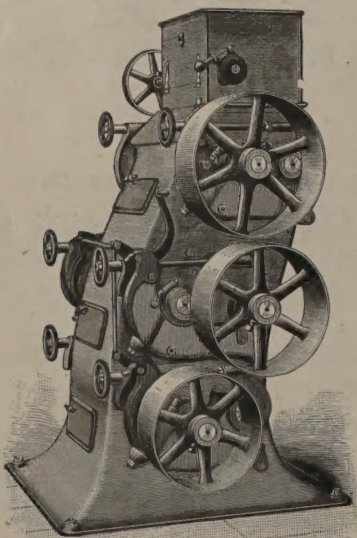
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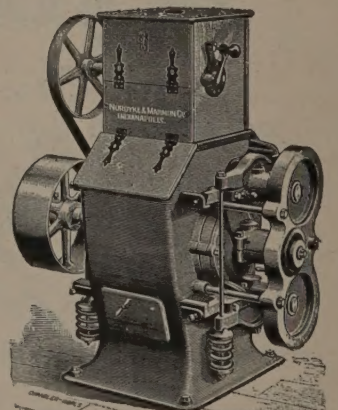


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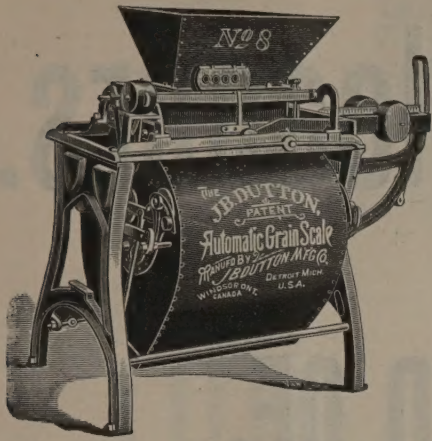
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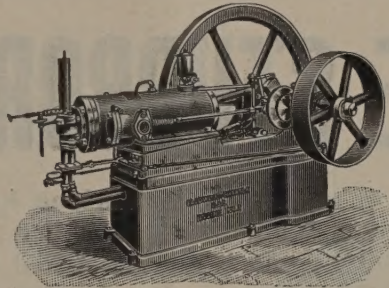
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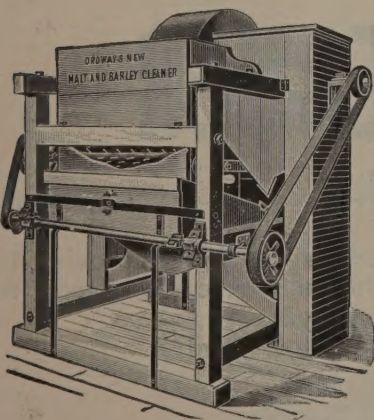
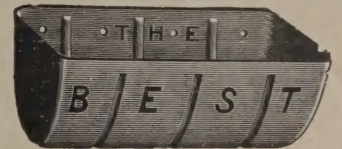
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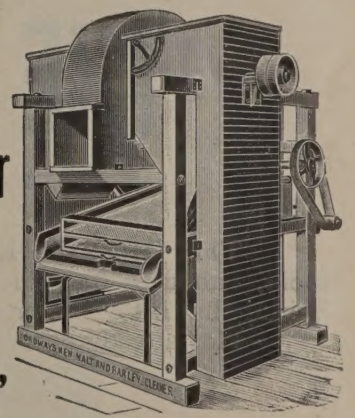
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This is the most perfect combined machine made for cleaning and polishing barley and degerminating and cleaning malt, and for general warehouse and elevator use. Cheapest and best thing out.

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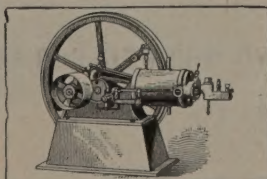
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